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G	AS-BUILT			BY _____		DATE _____		PROTECTION LOGIC DIAGRAM (AC/DC CIRCUITS)			<div></div> <div>الشركة السعودية للكهرباء</div> <div>Saudi Electricity Company</div>	SHEET NO.
	03	28.12.11	REVISED AS PER SEC LETTER #030343/270232/11, DATED: 10/09/2011	DRAWN BY M.USMAN		CHECKED BY TAMER		132kV SYSTEM				000
	02	06.08.11	REVISED AS PER SEC LETTER #030343/0144/11, DATED: 29/06/2011	DATE STARTED 09.02.2011		DATE COMPLETED _____		CONSTRUCTION OF NEW 380/132/13.8KV S/S#9027			NEXT 001	
	01	03.04.11	REVISED AS PER SEC LETTER #030343/0037/11, DATED: 22-03-2011	OPRG. DEPT. _____		ENG. DEPT. _____		RIYADH SAUDI ARABIA			REV. NO.	
	REV. NO.	DATE	DESCRIPTION								03	


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	1	2	3	4	5	6	7	8	9	10
A		CIRCUIT BREAKER (SF6)			21		DISTANCE RELAY	87T		TRANSFORMER OVERALL BIAS DIFFERENTIAL RELAY
		MOTORIZED DISCONNECT SWITCH			25		SYNCHRO CHECK RELAY	87B		BUSBAR DIFFERENTIAL HIGH IMPEDANCE RELAY
		MOTORIZED EARTHING SWITCH			27TC		TRIP CIRCUIT SUPERVISION RELAY	87PW		PILOT WIRE DIFFERENTIAL RELAY
B		CAPACITANCE VOLTAGE TRANSFORMER			50BF		BREAKER FAILURE RELAY	50PW		INSTENTANEOUS OVER CURRANT RELAY
		CURRENT TRANSFORMER			5IN		STANDBY E/F RELAY	95PW		PILOT CIRCUIT SUPERVISION REALY
C		BUS DUCT SF6			50/5IP		TRANSFORMER HV O/C INST./IDMT.RELAY	98PW		DESTABLISING REALY
		THREE WINDING GENERATOR TRANSFORMER			5IS		TRANSFORMER LV O/C & E/F IDMT.RELAY	49		THERMAL OVERLOAD
		HIGH SPEED MOTORIZED EARTH SWITCH			64NP		TRANSFORMER HV REF RELAY	90		VOLTAGE REGULATING RELAY
D		FUTURE LINE			64NS		TRANSFORMER LV REF RELAY	95		CT SUPERVISION RELAY
		POTENTIAL TRANSFORMER			67N		DIRECTIONAL E/F RELAY	23		TRANSFORMER COOLER FAIL
E		SURGE ARRESTER (OUTDOOR TYPE)			8I		UNDER FREQUENCY RELAY	26D-1		MAIN TRANSFORMER OIL TEMPERATURE HIGH STAGE-1
		SURGE ARRESTER (GIS TYPE)			87CP		CONNECTION DIFFERENTIAL HIGH IMPEDANCE RELAY	26D-2		MAIN TRANSFORMER OIL TEMPERATURE HIGH STAGE-2
		SF6/AIR BUSHING			87BD		BUSDUCT DIFFERENTIAL HIGH IMPEDANCE RELAY	26S		FIRE PROTECTION OPERATED (SERGI)
		SF6/OIL INTERFACE ENCLOSURE OF SGT			87T		TRANSFORMER DIFFERENTIAL HIGH IMPEDANCE RELAY	49WG		WINDING TEMPERATURE ALARM
F		SF6/OIL BUSHING OF GT						49T		WINDING TEMPERATURE TRIP
		U/G CABLE HEAD						630H-1		MAIN TANK OIL LEVEL HIGH
								630H-2		OLTC TANK OIL LEVEL HIGH

G

AS-BUILT			BY _____		DATE _____	
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01	03.04.11	REVISED AS PER SEC LETTER #030343/0037/11, DATED: 22-03-2011	OPRG. DEPT. _____ ENG. DEPT. _____			
REV. NO.	DATE	DESCRIPTION				

NOMENCLATURE FOR DEVICES	
RELAY & EQUIPMENTS USED FOR 132kV	
CONSTRUCTION OF NEW 380/132/13.8KV S/S#9027	
RIYADH	SAUDI ARABIA




الشركة السعودية للكهرباء

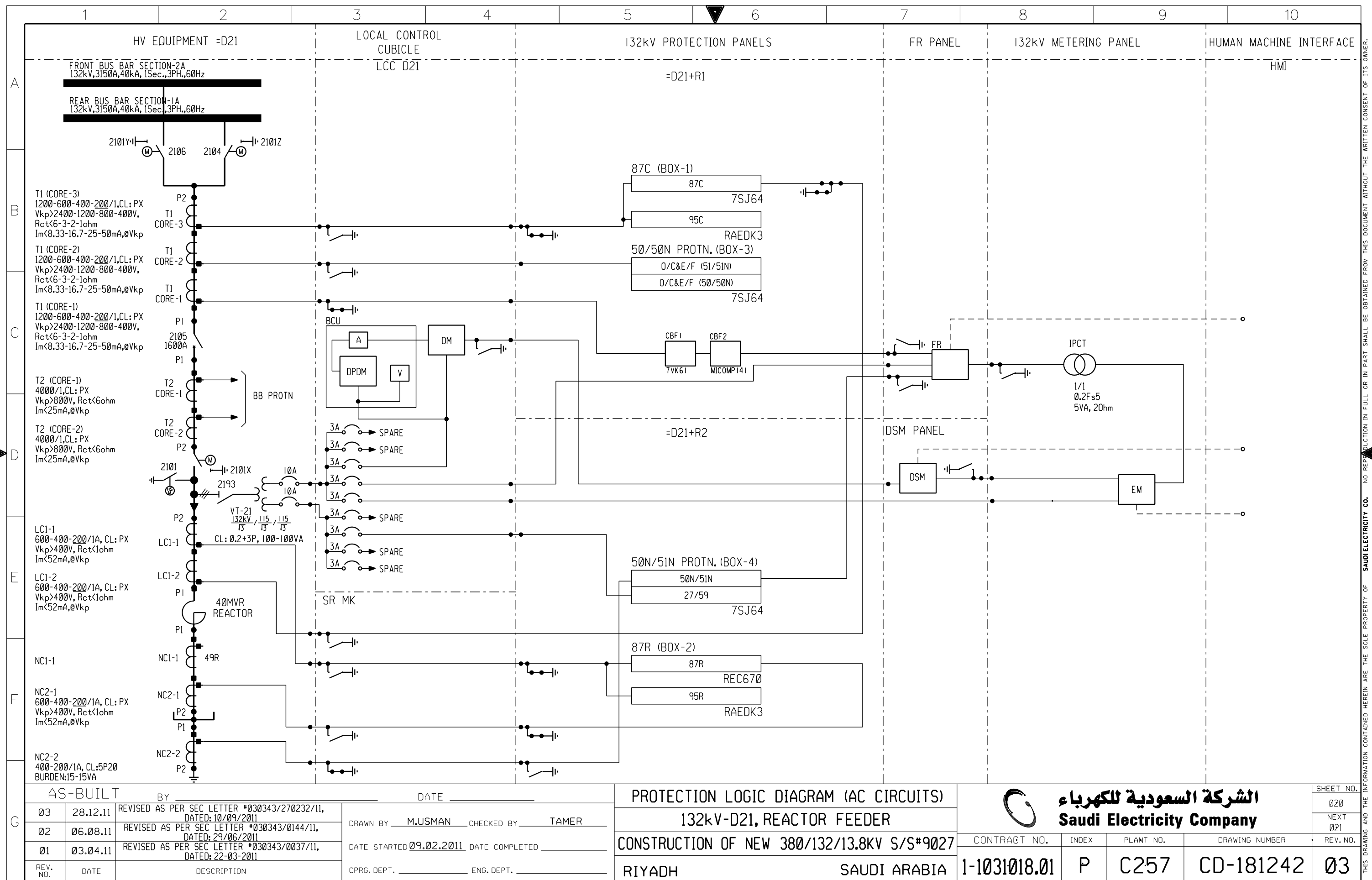
Saudi Electricity Company

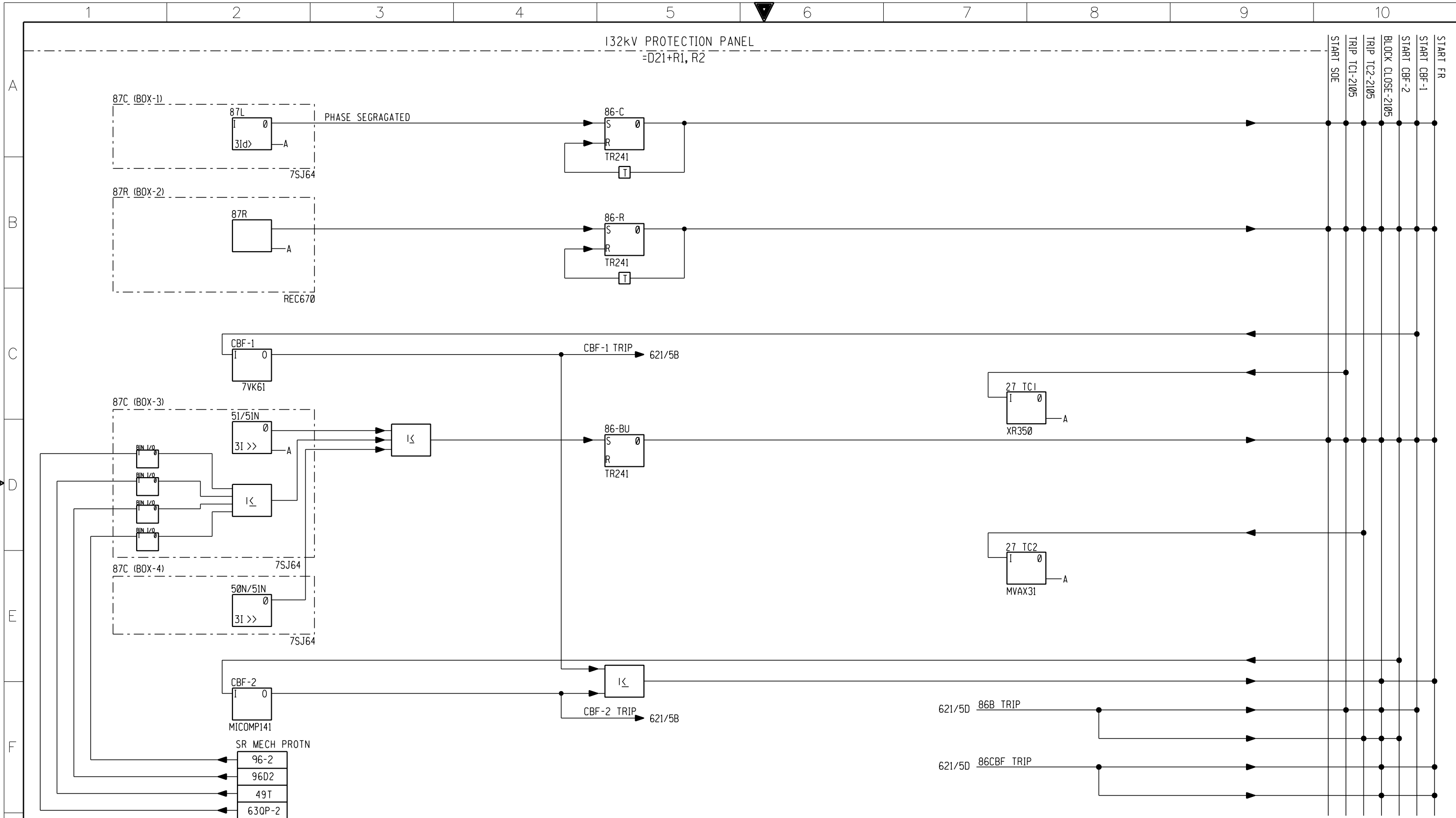
CONTRACT NO.	INDEX	PLANT NO.	DRAWING NUMBER	REV. NO.
1-1031018.01	P	C257	CD-181242	03

SHEET NO.
002
NEXT
003

	1	2	3	4	5	6	7	8	9	10
A			630L-1	MAIN TANK OIL LEVEL LOW			V	VOLTMETER		
			630L-2	OLTC TANK OIL LEVEL LOW			A	AMMETER		
B			630P-1	TAP CHANGER PROTECTIVE DEVICE ALARM						
			630P-2	TAP CHANGER PROTECTIVE DEVICE TRIP			W	WATTMETER		
			63	RAPID PRESSURE			VAR	VARMETER		
C			96-1	BUCHHOLZ GAS ALARM						
			96-2	BUCHHOLZ SURGE TRIP			WH	ENERGY METER		
			960-1	BURST PLATE BREAKING DEVICE MAIN TANK			A =	AMPERE TRANSDUCER		
D			960-2	BURST PLATE BREAKING DEVICE OLTC TANK			V =	VOLTAGE TRANSDUCER		
			86	TRIP RELAY ELECTRIC/HAND RESET			W =	WATT TRANSDUCER		
			86B	BUS BAR PROTECTION TRIP RELAY			VAR =	VAR TRANSDUCER		
E			86T	TRANSFORMER HV TRIP RELAY						
			94T	TRANSFORMER LV TRIP RELAY			&	AND GATE		
F			94	TRIP RELAY SELF RESET			I ≤	OR GATE		
			⏏	DIODE			VS	VOLTAGE SELECTOR SWITCH		
							AS	AMMETER SLECTOR SWITCH		

G	AS-BUILT			BY _____	DATE _____	NOMENCLATURE FOR DEVICES		<div>الشركة السعودية للكهرباء Saudi Electricity Company</div>				SHEET NO.
	03	28.12.11	REVISED AS PER SEC LETTER #030343/270232/11, DATED: 10/09/2011	DRAWN BY _____ M.USMAN _____ CHECKED BY _____ TAMER _____		RELAY & EQUIPMENTS USED FOR 132kV						003
	02	06.08.11	REVISED AS PER SEC LETTER #030343/0144/11, DATED: 29/06/2011	DATE STARTED 09.02.2011 DATE COMPLETED _____		CONSTRUCTION OF NEW 380/132/13.8KV S/S#9027		CONTRACT NO.	INDEX	PLANT NO.	DRAWING NUMBER	NEXT 020
	01	03.04.11	REVISED AS PER SEC LETTER #030343/0037/11, DATED: 22-03-2011	OPRG. DEPT. _____ ENG. DEPT. _____		RIYADH SAUDI ARABIA		1-1031018.01	P	C257	CD-181242	REV. NO. 03
	REV. NO.	DATE	DESCRIPTION									

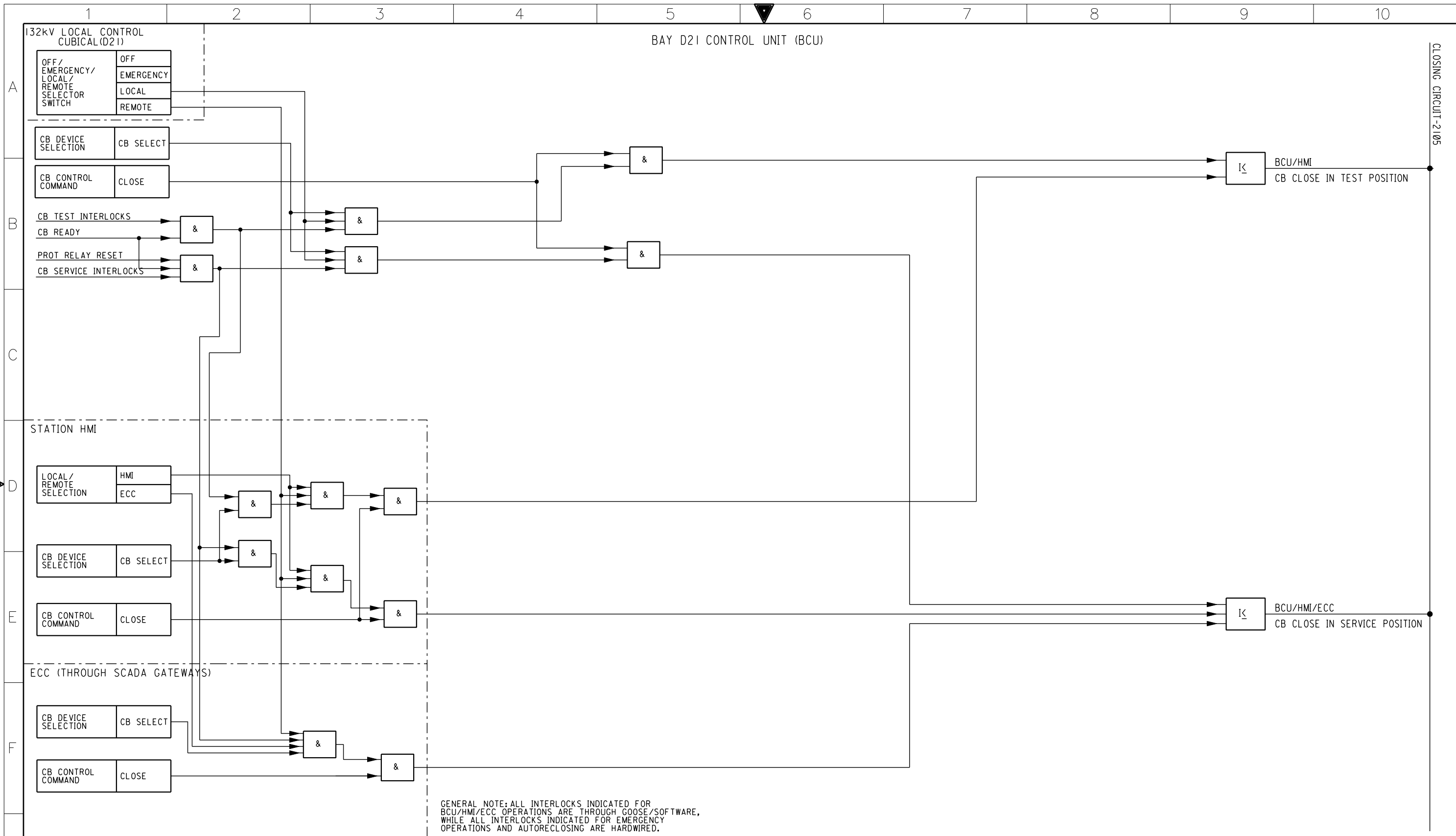




AS-BUILT				PROTECTION LOGIC DIAGRAM (DC CIRCUITS)				الشركة السعودية للكهرباء		SHEET NO.	
BY _____				132kV-D21, REACTOR FEEDER				Saudi Electricity Company		021	
03	28.12.11	REVISED AS PER SEC LETTER #030343/270232/11, DATED: 10/09/2011	DATE _____	CONSTRUCTION OF NEW 380/132/13.8KV S/S#9027				NEXT		022	
02	06.08.11	REVISED AS PER SEC LETTER #030343/0144/11, DATED: 29/06/2011	DRAWN BY M.USMAN CHECKED BY TAMER	SAUDI ARABIA				REV. NO.		03	
01	03.04.11	REVISED AS PER SEC LETTER #030343/0037/11, DATED: 22-03-2011	DATE STARTED 09.02.2011 DATE COMPLETED _____	RIYADH				CONTRACT NO.		1-1031018.01	
REV. NO.	DATE	DESCRIPTION		OPRG. DEPT. _____ ENG. DEPT. _____		INDEX		PLANT NO.		DRAWING NUMBER	
						P		C257		CD-181242	

SEC/COA-D (2008/03)

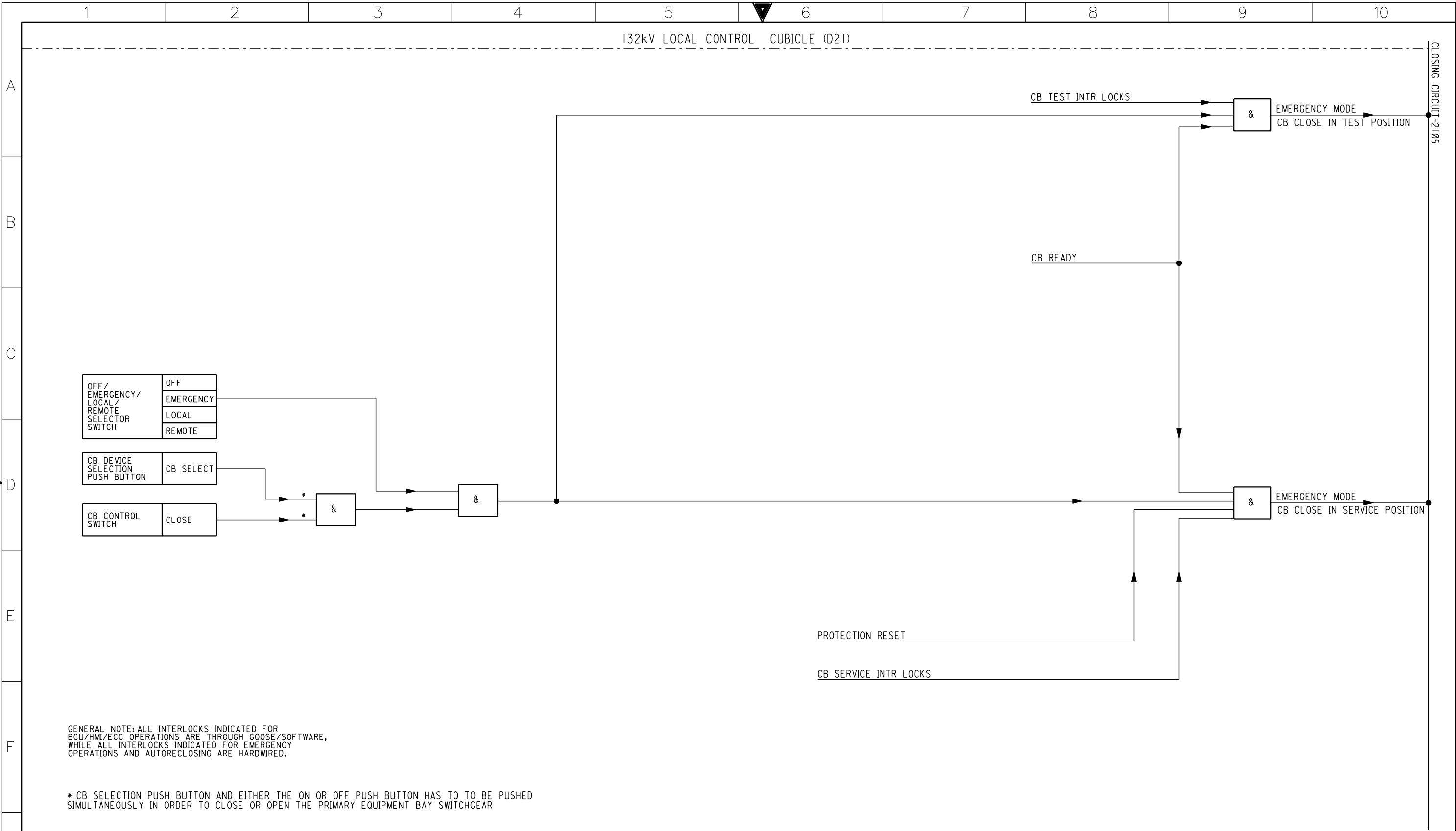
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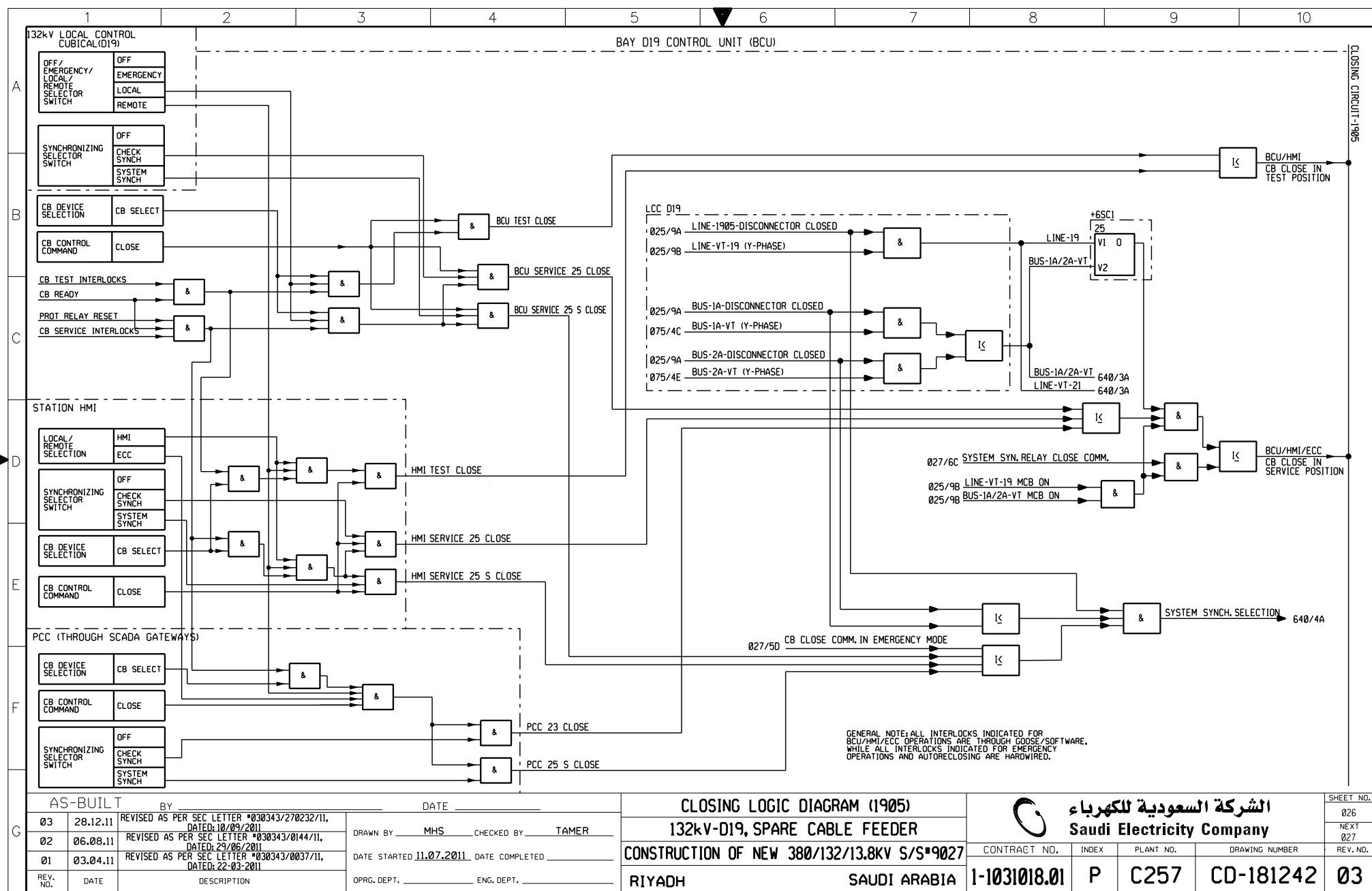
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BY				132kV-D21, REACTOR FEEDER				Saudi Electricity Company				022
03	28.12.11	REVISED AS PER SEC LETTER #030343/270232/11, DATED: 10/09/2011	DRAWN BY M.USMAN CHECKED BY TAMER	CONSTRUCTION OF NEW 380/132/13.8KV S/S#9027				CONTRACT NO.	INDEX	PLANT NO.	DRAWING NUMBER	REV. NO.
02	06.08.11	REVISED AS PER SEC LETTER #030343/0144/11, DATED: 29/06/2011	DATE STARTED 09.02.2011 DATE COMPLETED	RIYADH SAUDI ARABIA				1-1031018.01	P	C257	CD-181242	03
01	03.04.11	REVISED AS PER SEC LETTER #030343/0037/11, DATED: 22-03-2011	OPRG. DEPT. ENG. DEPT.									
REV. NO.	DATE	DESCRIPTION										

SEC/COA-D (2008/03)

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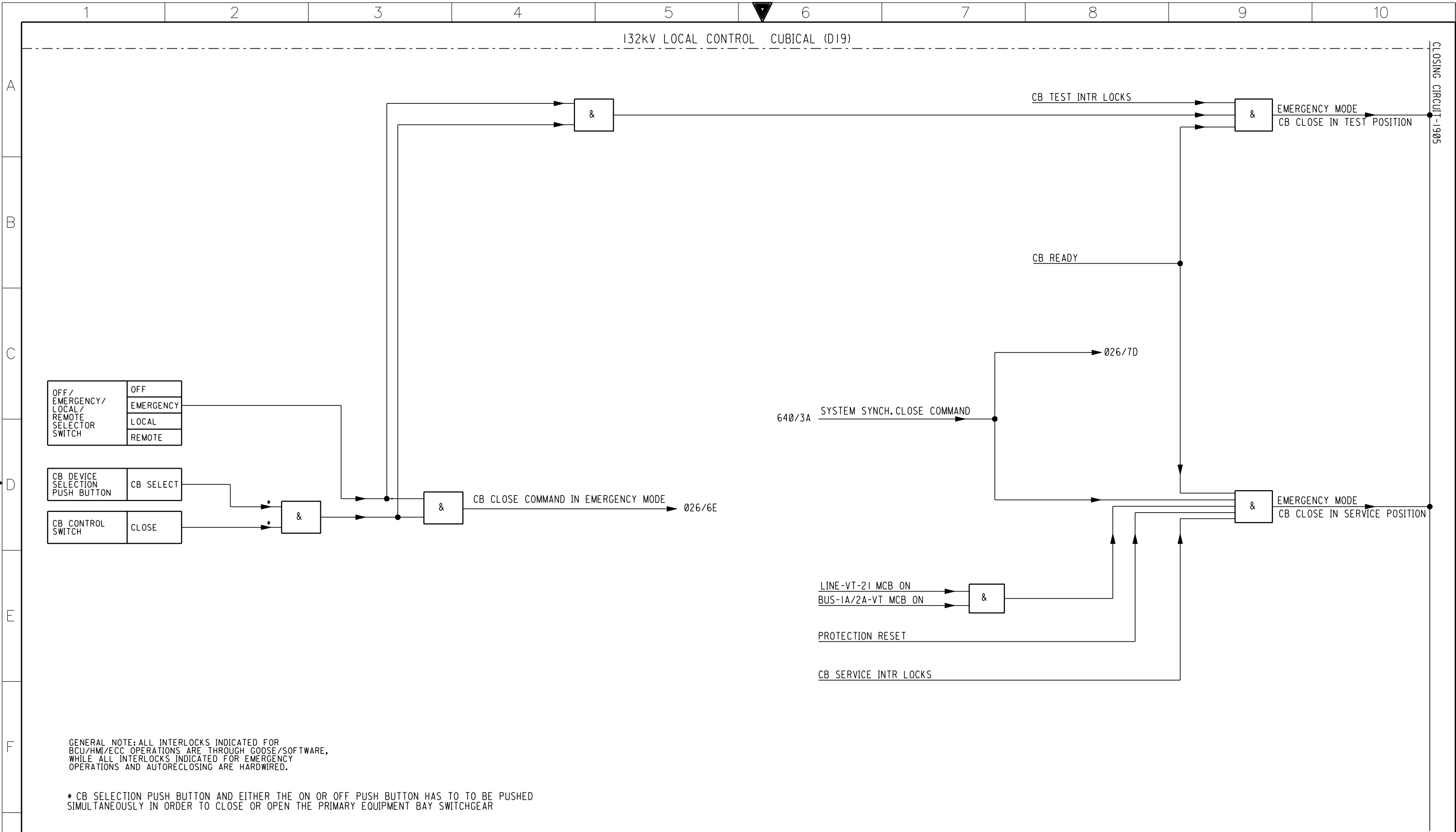


G	AS-BUILT			BY _____	DATE _____	CLOSING LOGIC · DIAGRAM (2105)		 <div>الشركة السعودية للكهرباء Saudi Electricity Company</div>				SHEET NO.	
	03	28.12.11	REVISED AS PER SEC LETTER #030343/270232/11, DATED: 10/09/2011	DRAWN BY _____ MHS _____ CHECKED BY _____ TAMER _____		132kV-D21, REACTOR FEEDER						023	
	02	06.08.11	REVISED AS PER SEC LETTER #030343/0144/11, DATED: 29/06/2011	DATE STARTED 11.07.2011 DATE COMPLETED _____		CONSTRUCTION OF NEW 380/132/13.8KV S/S#9027		NEXT 025					
	01	03.04.11	REVISED AS PER SEC LETTER #030343/0037/11, DATED: 22-03-2011	OPRG. DEPT. _____ ENG. DEPT. _____		RIYADH SAUDI ARABIA		REV. NO.					
	REV. NO.	DATE	DESCRIPTION					CONTRACT NO.		INDEX	PLANT NO.	DRAWING NUMBER	03



SEC/COA-D (2008/03)

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REVISED AS PER SEC LETTER #030343/270232/11,
DATED: 10/09/2011

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REVISED AS PER SEC LETTER #030343/0144/11,
DATED: 29/06/2011

01

03.04.11

REVISED AS PER SEC LETTER #030343/0037/11,
DATED: 22-03-2011

REV. NO.

DATE

DESCRIPTION

DRAWN BY

MHS

CHECKED BY

TAMER

DATE STARTED

11.07.2011

DATE COMPLETED

OPRG. DEPT.

ENG. DEPT.


CLOSING LOGIC · DIAGRAM (1905)

132kV-D19, SPARE CABLE FEEDER

CONSTRUCTION OF NEW 380/132/13.8KV S/S#9027

RIYADH

SAUDI ARABIA



الشركة السعودية للكهرباء

Saudi Electricity Company

CONTRACT NO.

INDEX

PLANT NO.

DRAWING NUMBER

1-1031018.01

P

C257

CD-181242

SHEET NO.

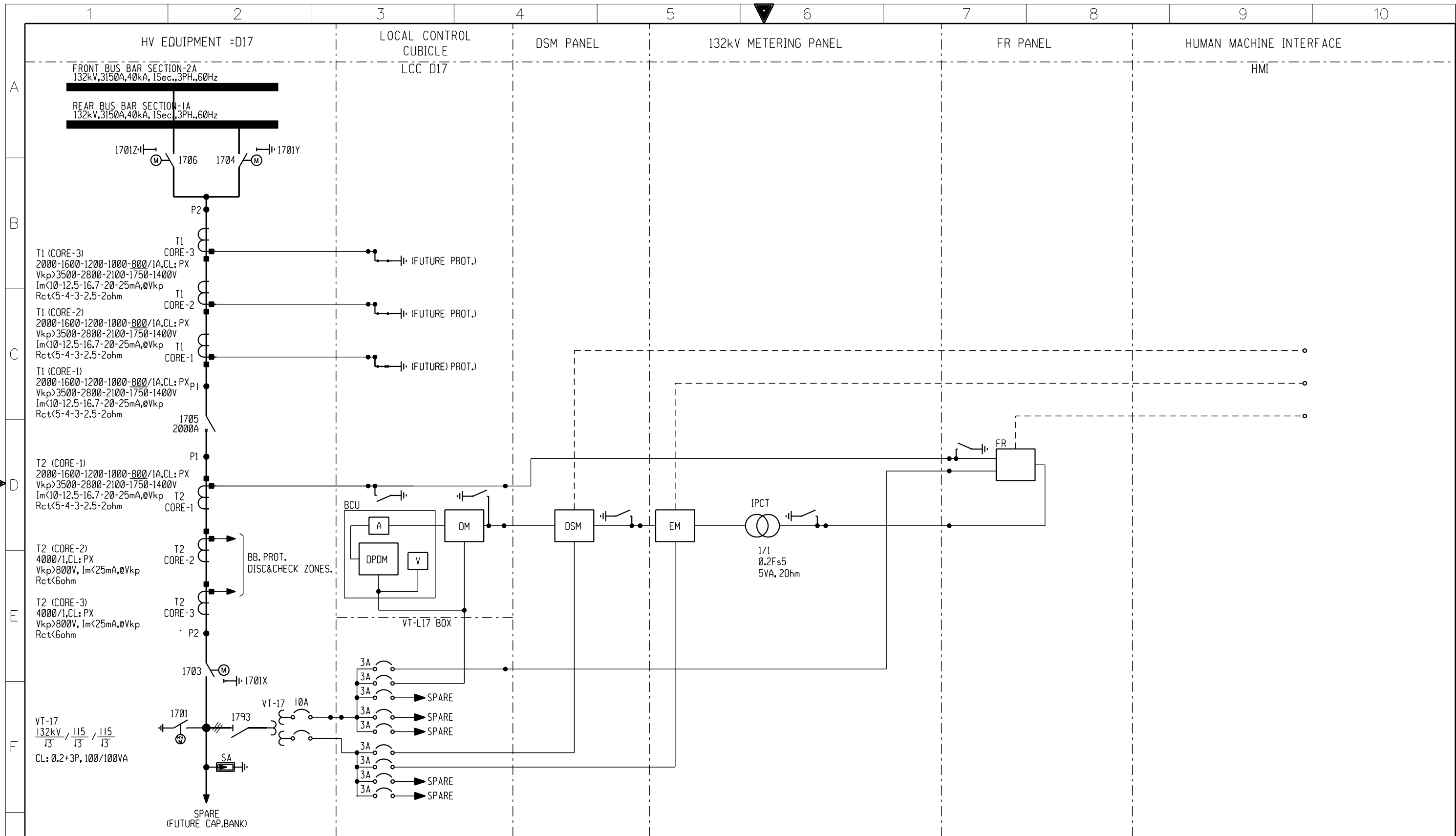
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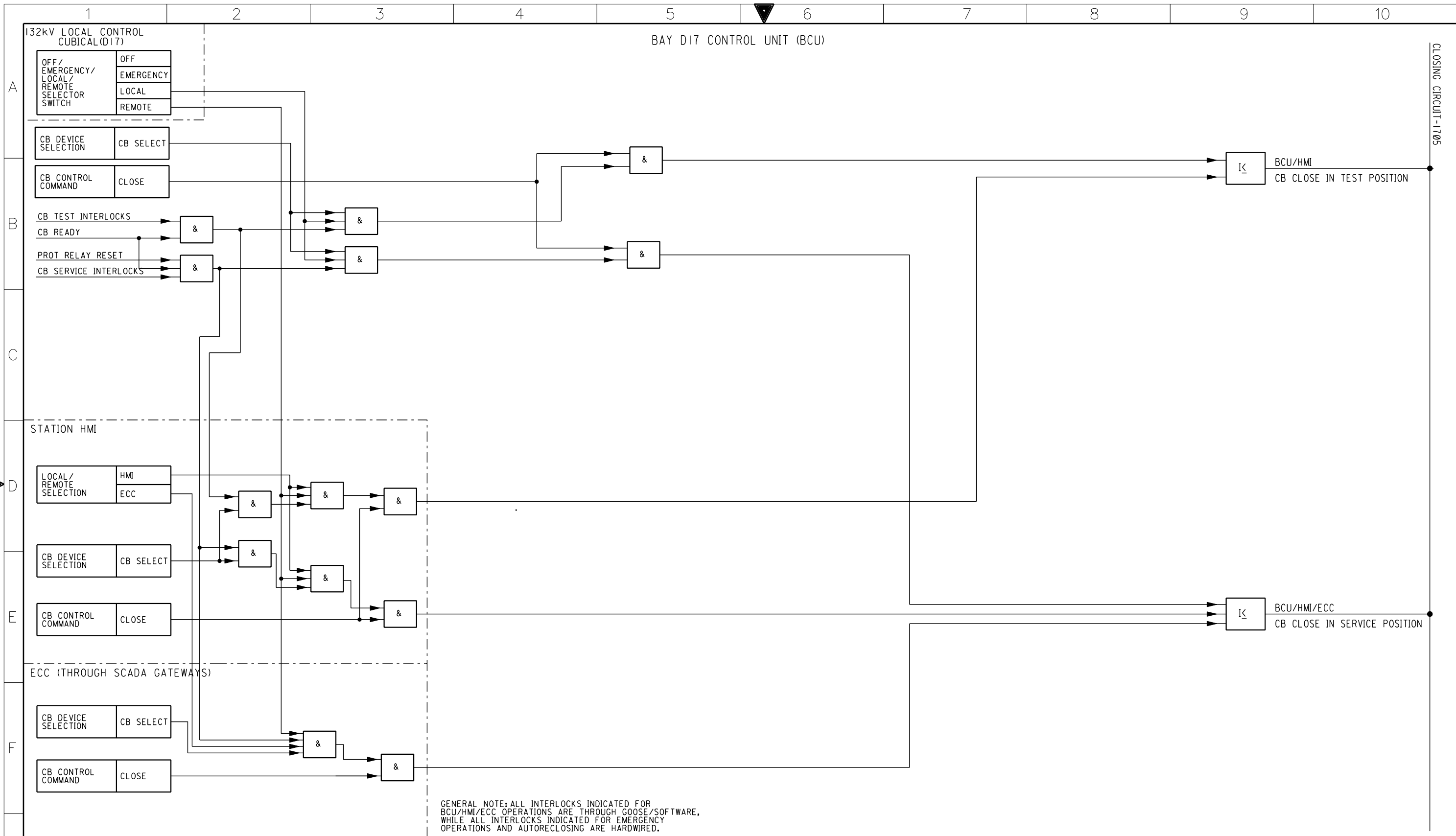
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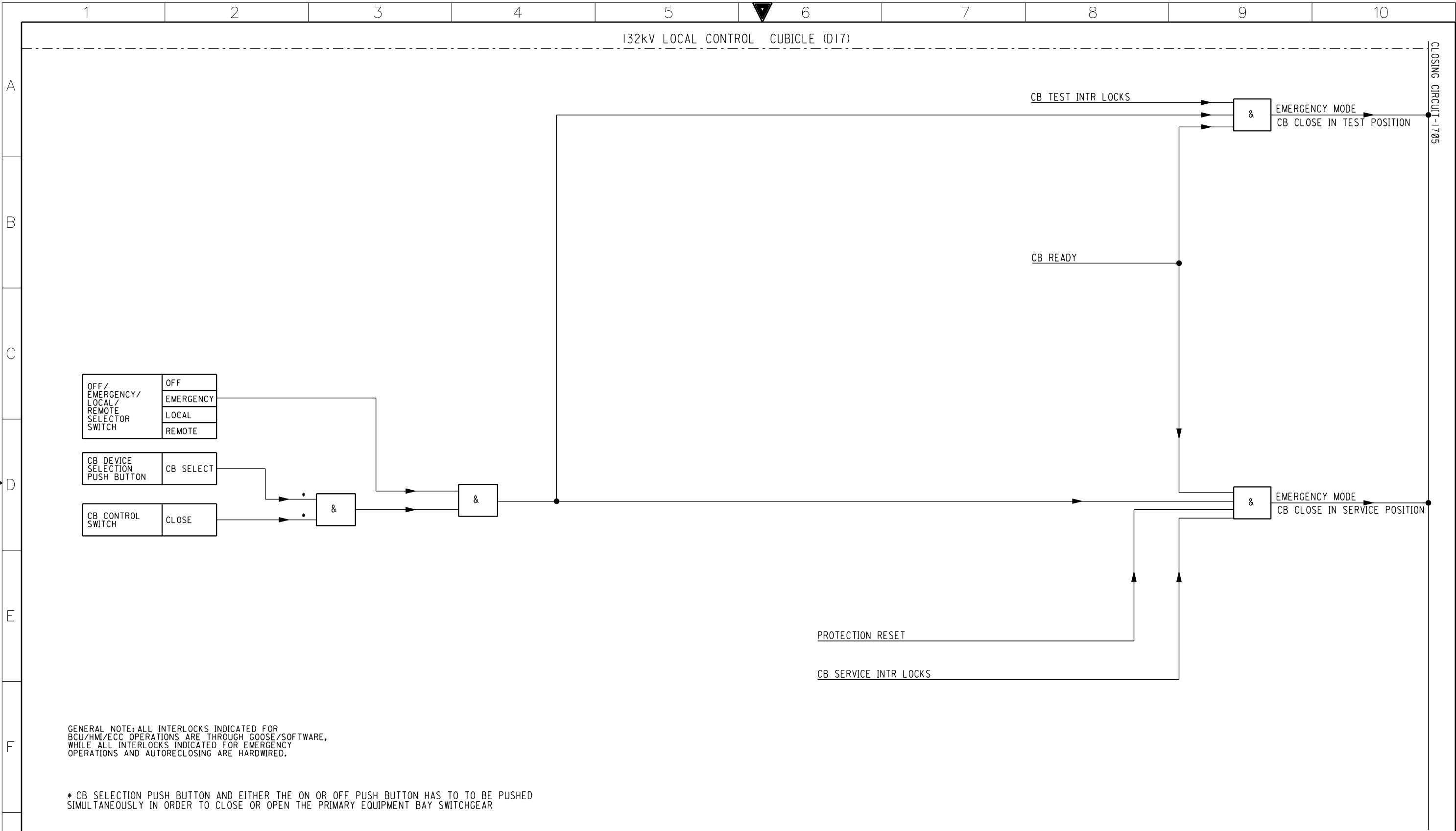
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G	AS-BUILT			BY _____	DATE _____	PROTECTION LOGIC DIAGRAM (AC CIRCUITS)		<div></div> <div>الشركة السعودية للكهرباء</div> <div>Saudi Electricity Company</div>				SHEET NO.	
	03	28.12.11	REVISED AS PER SEC LETTER #030343/270232/11, DATED: 10/09/2011	DRAWN BY M.USMAN CHECKED BY TAMER		132kV-D17, FUTURE CAPACITOR BANK						030	
	02	06.08.11	REVISED AS PER SEC LETTER #030343/0144/11, DATED: 29/06/2011	DATE STARTED 09.02.2011 DATE COMPLETED _____		CONSTRUCTION OF NEW 380/132/13.8KV S/S#9027		NEXT					
	01	03.04.11	REVISED AS PER SEC LETTER #030343/0037/11, DATED: 22-03-2011	OPRG. DEPT. _____ ENG. DEPT. _____		SAUDI ARABIA		031					
	REV. NO.	DATE	DESCRIPTION					REV. NO.					
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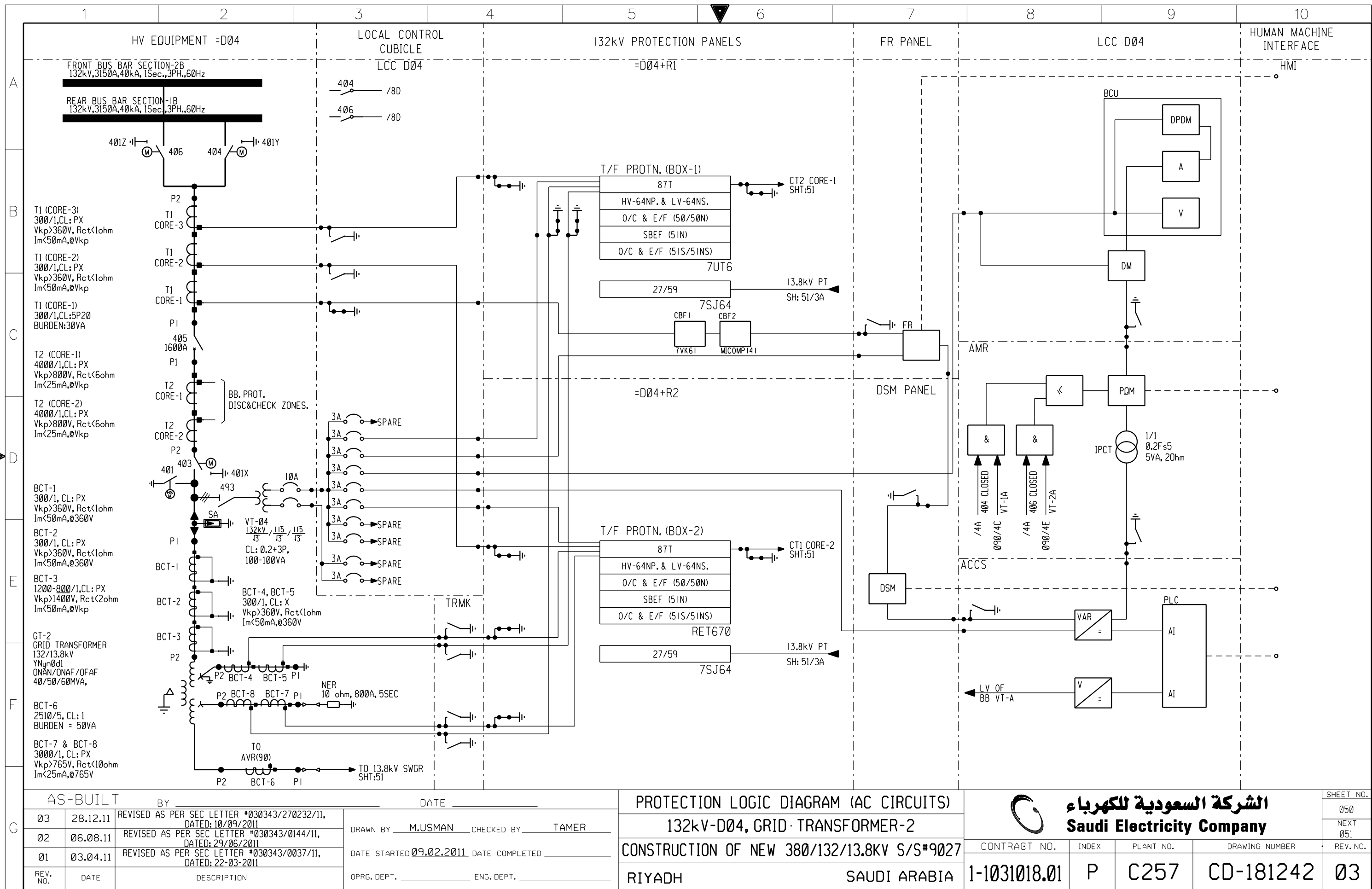


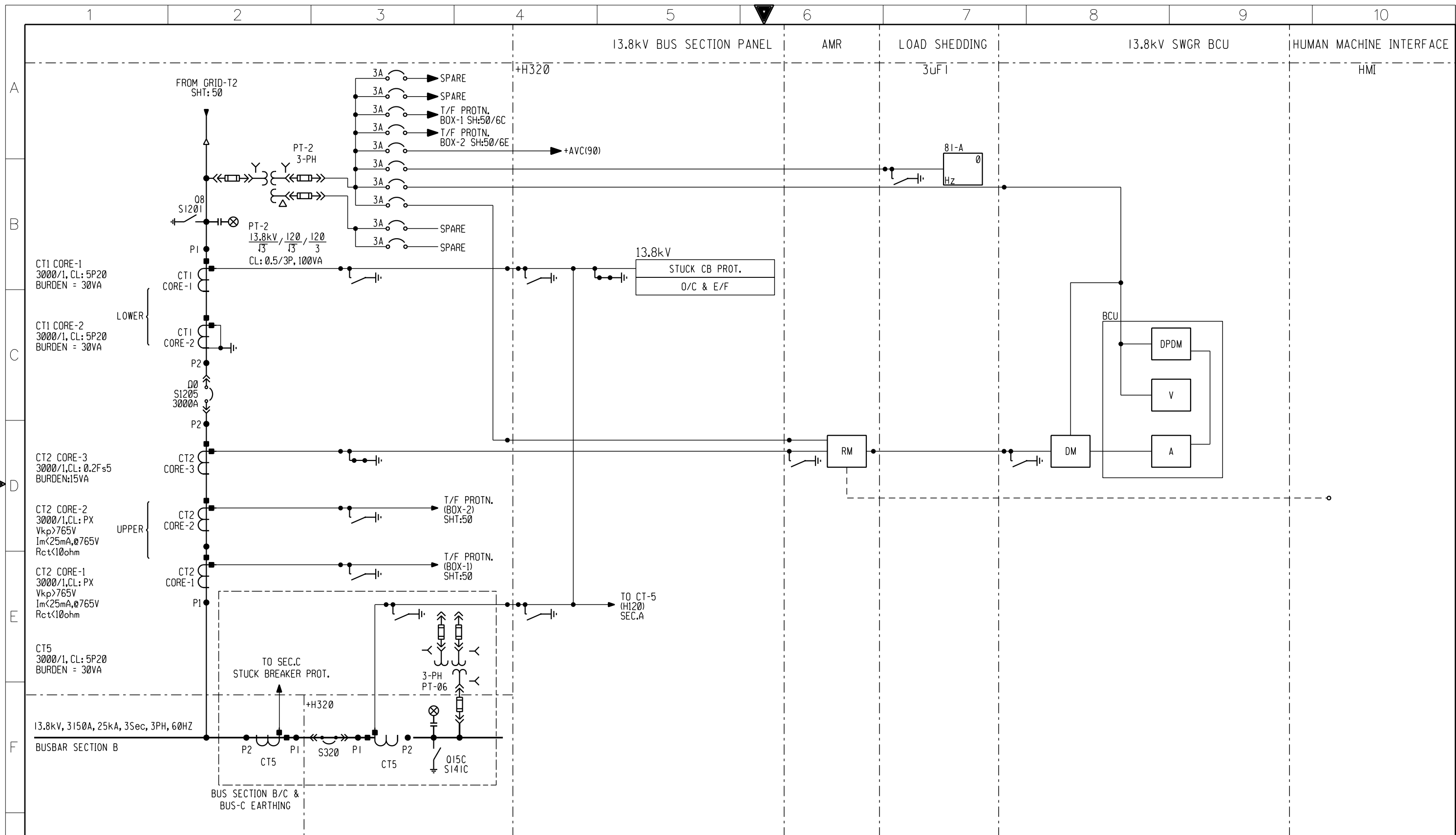
G	AS-BUILT				BY _____		DATE _____		CLOSING LOGIC · DIAGRAM (1705)				<div></div> <div>الشركة السعودية للكهرباء</div> <div>Saudi Electricity Company</div>				SHEET NO.	
	03	28.12.11	REVISED AS PER SEC LETTER #030343/270232/11, DATED: 10/09/2011		DRAWN BY _____ MHS _____ CHECKED BY _____ TAMER				132kV-D17, FUTURE CAPACITOR BANK								031	
	02	06.08.11	REVISED AS PER SEC LETTER #030343/0144/11, DATED: 29/06/2011						CONSTRUCTION OF NEW 380/132/13.8KV S/S#9027				NEXT 032					
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	REV. NO.	DATE	DESCRIPTION		OPRG. DEPT. _____ ENG. DEPT. _____				RIYADH SAUDI ARABIA		1-1031018.01	P	C257	CD-181242	03			



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AS-BUILT				BY _____		DATE _____		CLOSING LOGIC · DIAGRAM (1705)				<div><div></div><div>الشركة السعودية للكهرباء</div><div>Saudi Electricity Company</div></div>				SHEET NO.	
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02	06.08.11	REVISED AS PER SEC LETTER #030343/0144/11, DATED: 29/06/2011							CONSTRUCTION OF NEW 380/132/13.8KV S/S#9027				NEXT 050				
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REV. NO.	DATE	DESCRIPTION							1-1031018.01				P	C257	CD-181242	03	

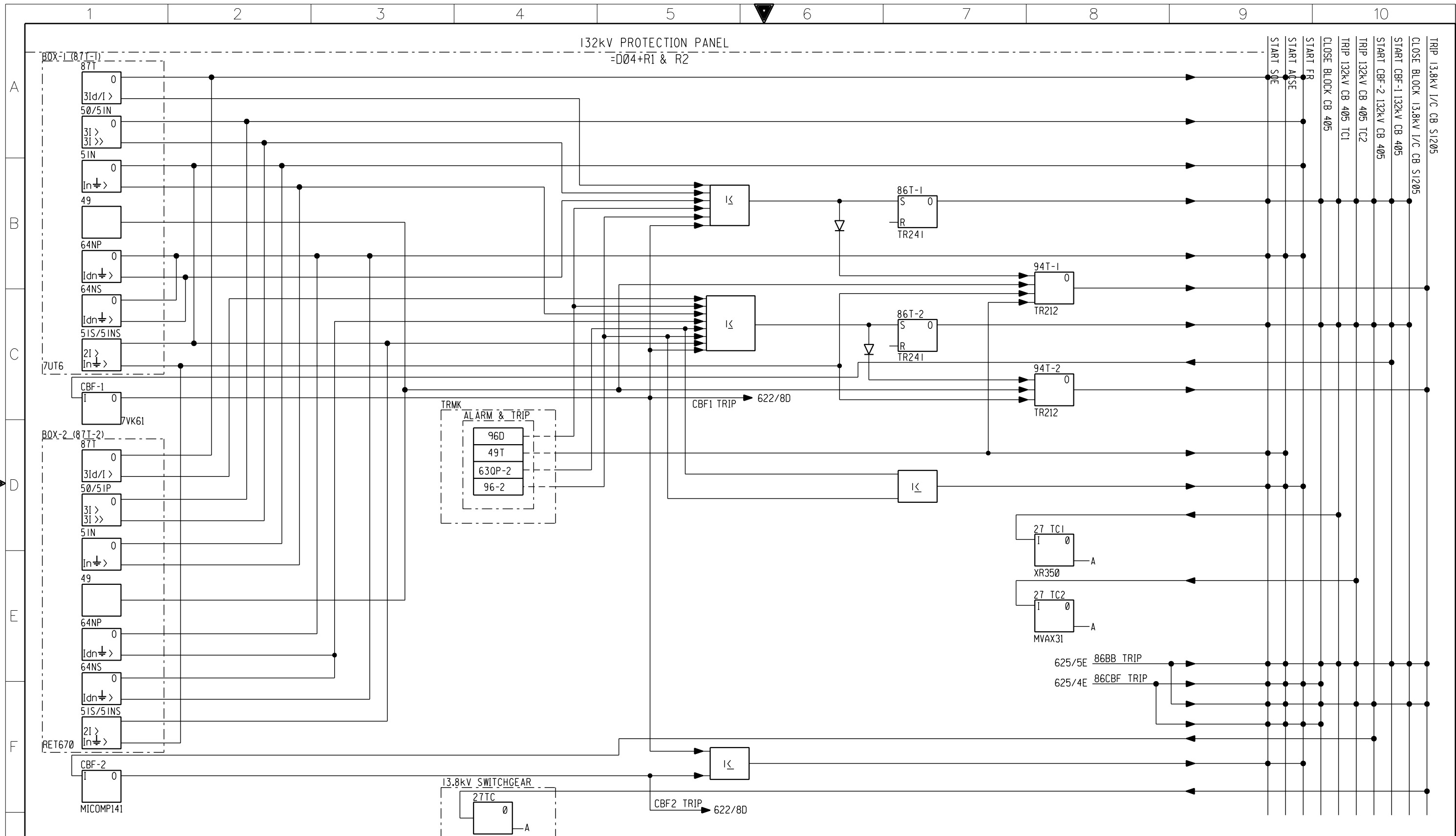




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03	28.12.11	REVISED AS PER SEC LETTER #030343/270232/11, DATED: 10/09/2011	DRAWN BY M.USMAN CHECKED BY TAMER		132kV-D04, GRID TRANSFORMER-2				051	
02	06.08.11	REVISED AS PER SEC LETTER #030343/0144/11, DATED: 29/06/2011	DATE STARTED 09.02.2011 DATE COMPLETED		CONSTRUCTION OF NEW 380/132/13.8KV S/S#9027		CONTRACT NO.	INDEX	PLANT NO.	DRAWING NUMBER
01	03.04.11	REVISED AS PER SEC LETTER #030343/0037/11, DATED: 22-03-2011	OPRG. DEPT. ENG. DEPT.		RIYADH SAUDI ARABIA		1-1031018.01	P	C257	CD-181242
REV. NO.	DATE	DESCRIPTION								REV. NO.

SEC/COA-D (2008/03)


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AS-BUILT				BY _____		DATE _____	
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02	06.08.11	REVISED AS PER SEC LETTER #030343/0144/11, DATED: 29/06/2011		DATE STARTED	09.02.2011	DATE COMPLETED	
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REV. NO.	DATE	DESCRIPTION					

PROTECTION LOGIC DIAGRAM (DC CIRCUITS)			
132kV-D04, GRID TRANSFORMER-2			
CONSTRUCTION OF NEW 380/132/13.8KV S/S#9027			
RIYADH		SAUDI ARABIA	



الشركة السعودية للكهرباء

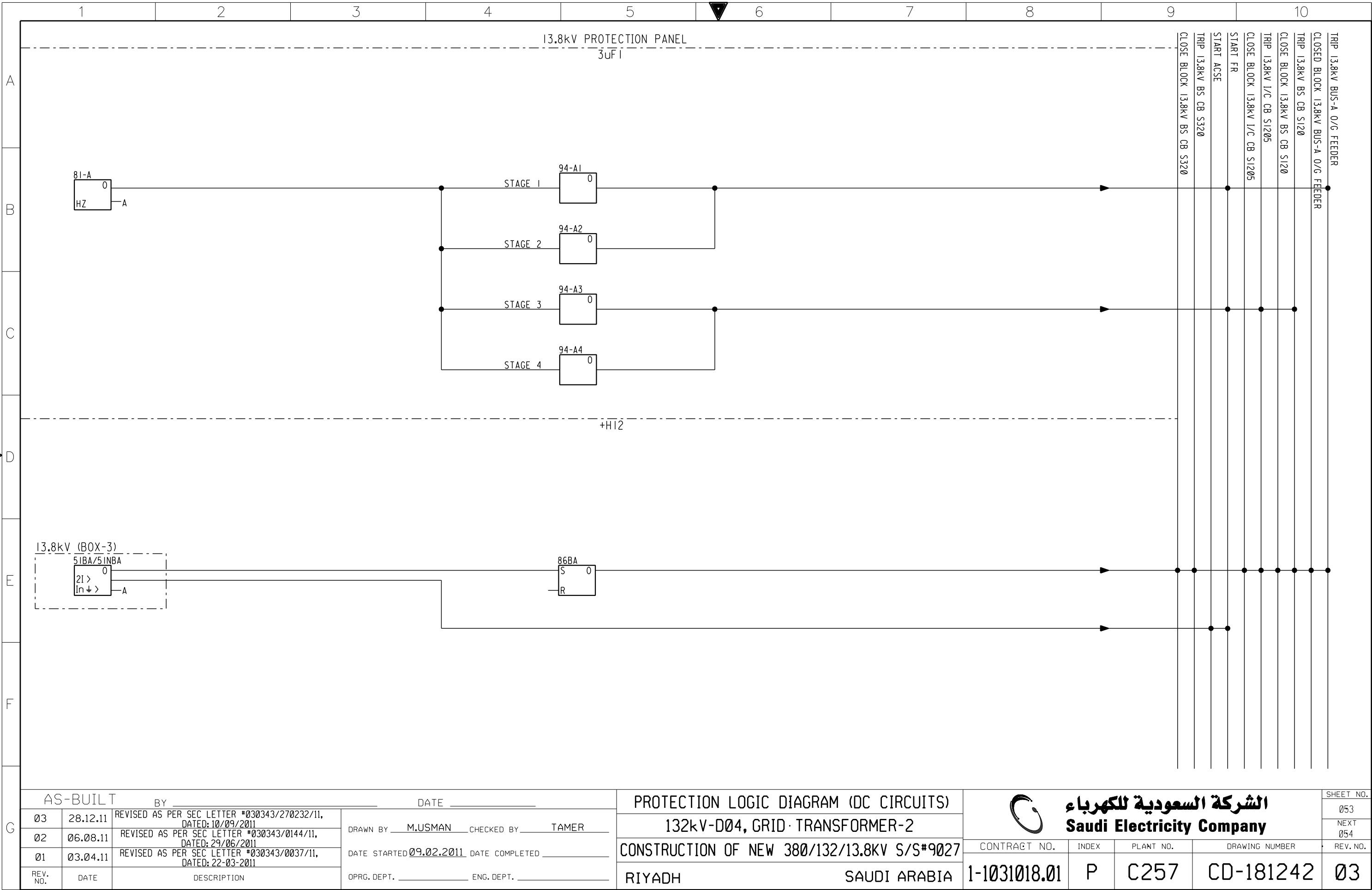
Saudi Electricity Company


CONTRACT NO.	INDEX	PLANT NO.	DRAWING NUMBER	REV. NO.
1-1031018.01	P	C257	CD-181242	03

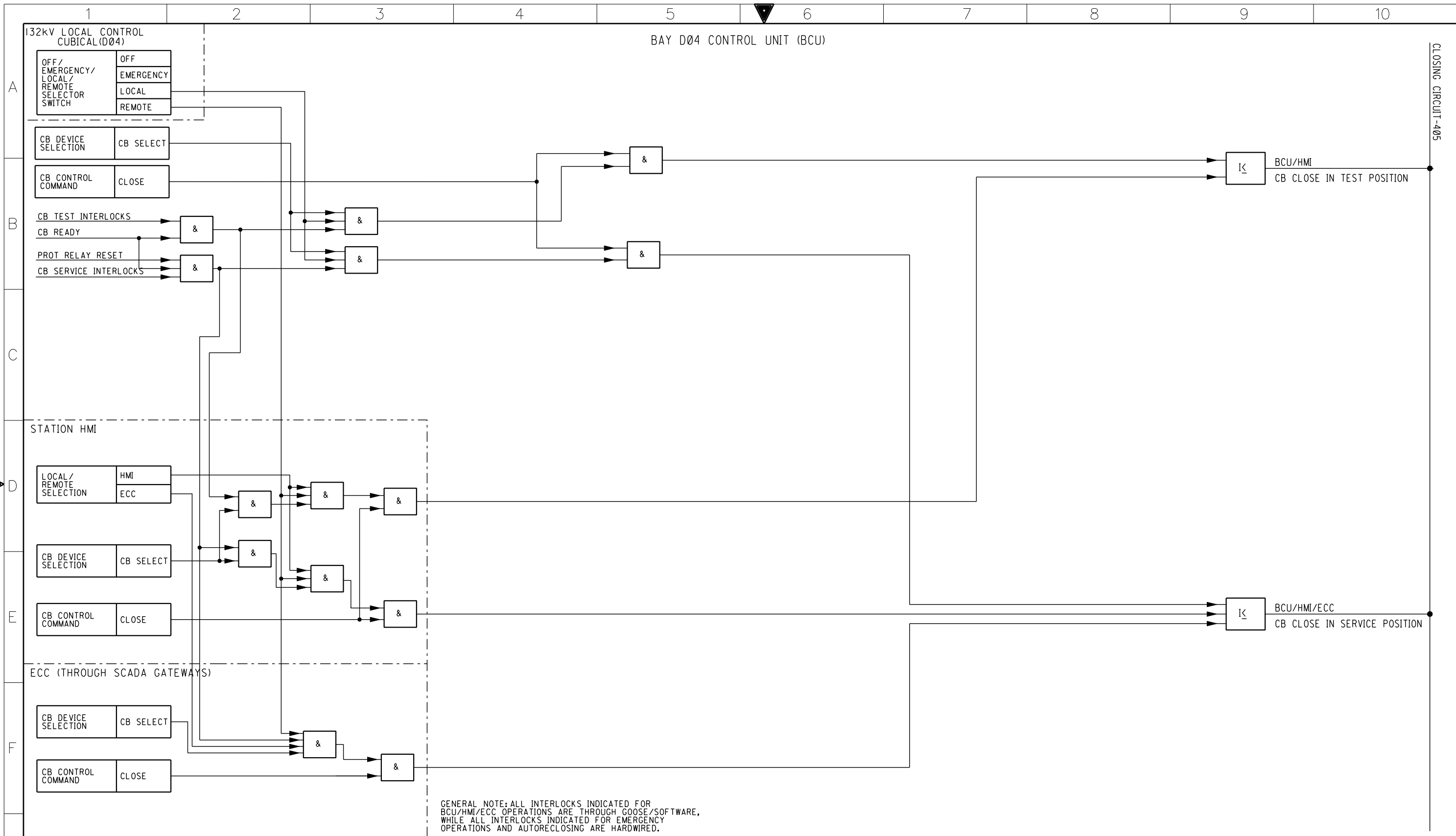
SHEET NO.	052
NEXT	053

SEC/COA-D (2008/03)

SECD01




G	AS-BUILT			BY _____	DATE _____	PROTECTION LOGIC DIAGRAM (DC CIRCUITS)		<div><div>الشركة السعودية للكهرباء Saudi Electricity Company</div></div>				SHEET NO.	
	03	28.12.11	REVISED AS PER SEC LETTER #030343/270232/11, DATED: 10/09/2011	DRAWN BY _____ M.USMAN _____ CHECKED BY _____ TAMER _____		132kV-D04, GRID · TRANSFORMER-2						053	
	02	06.08.11	REVISED AS PER SEC LETTER #030343/0144/11, DATED: 29/06/2011	DATE STARTED 09.02.2011 DATE COMPLETED _____		CONSTRUCTION OF NEW 380/132/13.8KV S/S#9027		NEXT 054					
	01	03.04.11	REVISED AS PER SEC LETTER #030343/0037/11, DATED: 22-03-2011	OPRG. DEPT. _____ ENG. DEPT. _____		RIYADH SAUDI ARABIA		REV. NO.					
	REV. NO.	DATE	DESCRIPTION					CONTRACT NO.	INDEX	PLANT NO.	DRAWING NUMBER	03	



G

AS-BUILT				BY _____		DATE _____	
03	28.12.11	REVISED AS PER SEC LETTER #030343/270232/11, DATED: 10/09/2011	DRAWN BY _____ MHS _____ CHECKED BY _____ TAMER _____				
02	06.08.11	REVISED AS PER SEC LETTER #030343/0144/11, DATED: 29/06/2011	DATE STARTED 11.07.2011 DATE COMPLETED _____				
01	03.04.11	REVISED AS PER SEC LETTER #030343/0037/11, DATED: 22-03-2011	OPRG. DEPT. _____ ENG. DEPT. _____				
REV. NO.	DATE	DESCRIPTION					

CLOSING LOGIC DIAGRAM (405)	
132kV-D04, GRID TRANSFORMER-2	
CONSTRUCTION OF NEW 380/132/13.8KV S/S#9027	
RIYADH SAUDI ARABIA	

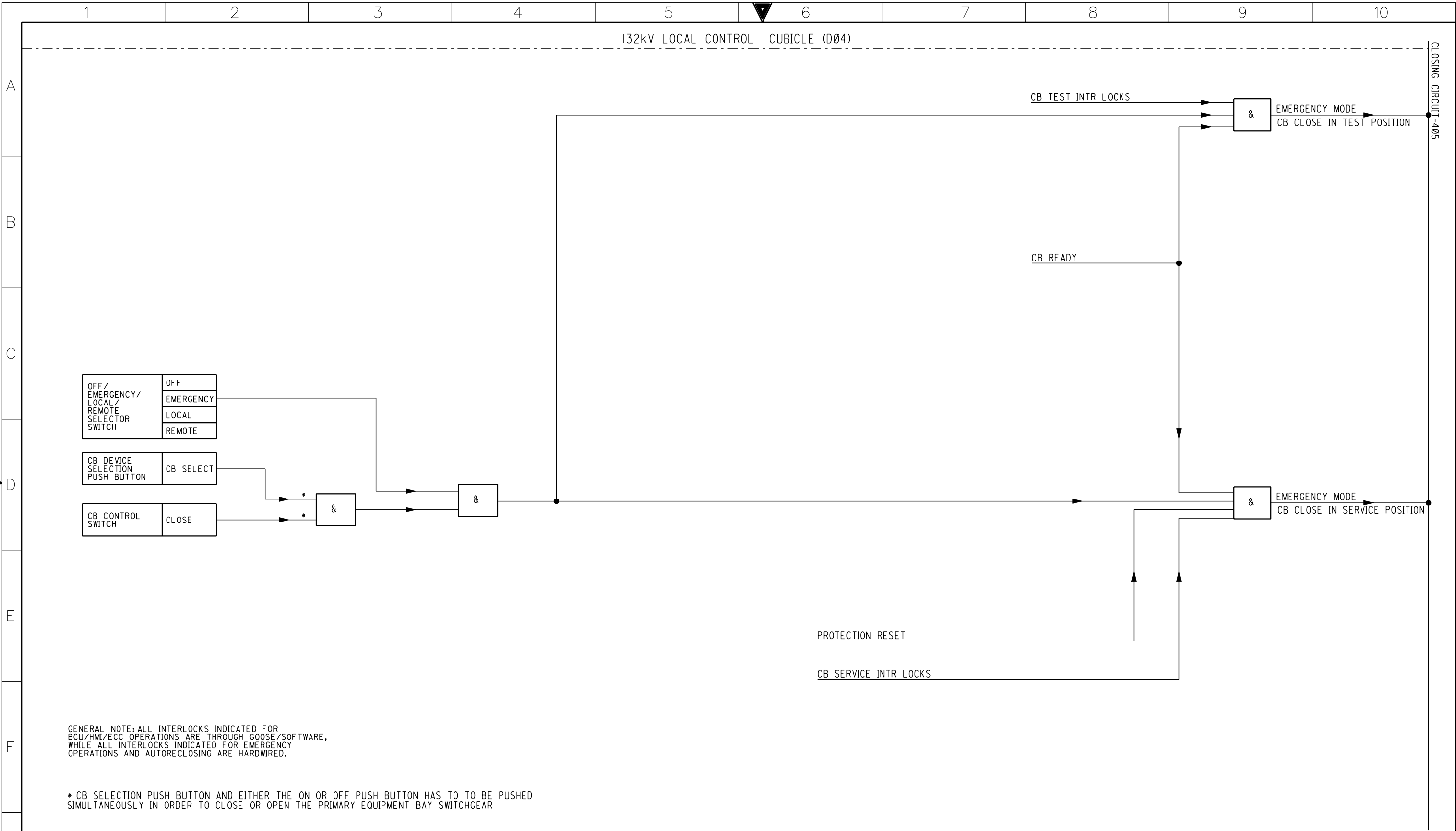


الشركة السعودية للكهرباء

Saudi Electricity Company

CONTRACT NO.	INDEX	PLANT NO.	DRAWING NUMBER	REV. NO.
1-1031018.01	P	C257	CD-181242	03


SHEET NO.	054
NEXT	055



G

AS-BUILT				BY _____		DATE _____	
03	28.12.11	REVISED AS PER SEC LETTER #030343/270232/11, DATED: 10/09/2011	DRAWN BY _____ MHS _____ CHECKED BY _____ TAMER _____				
02	06.08.11	REVISED AS PER SEC LETTER #030343/0144/11, DATED: 29/06/2011	DATE STARTED 11.07.2011 DATE COMPLETED _____				
01	03.04.11	REVISED AS PER SEC LETTER #030343/0037/11, DATED: 22-03-2011					
REV. NO.	DATE	DESCRIPTION	OPRG. DEPT. _____		ENG. DEPT. _____		

CLOSING LOGIC DIAGRAM (405)	
132kV-D04, GRID TRANSFORMER-2	
CONSTRUCTION OF NEW 380/132/13.8KV S/S#9027	
RIYADH	SAUDI ARABIA

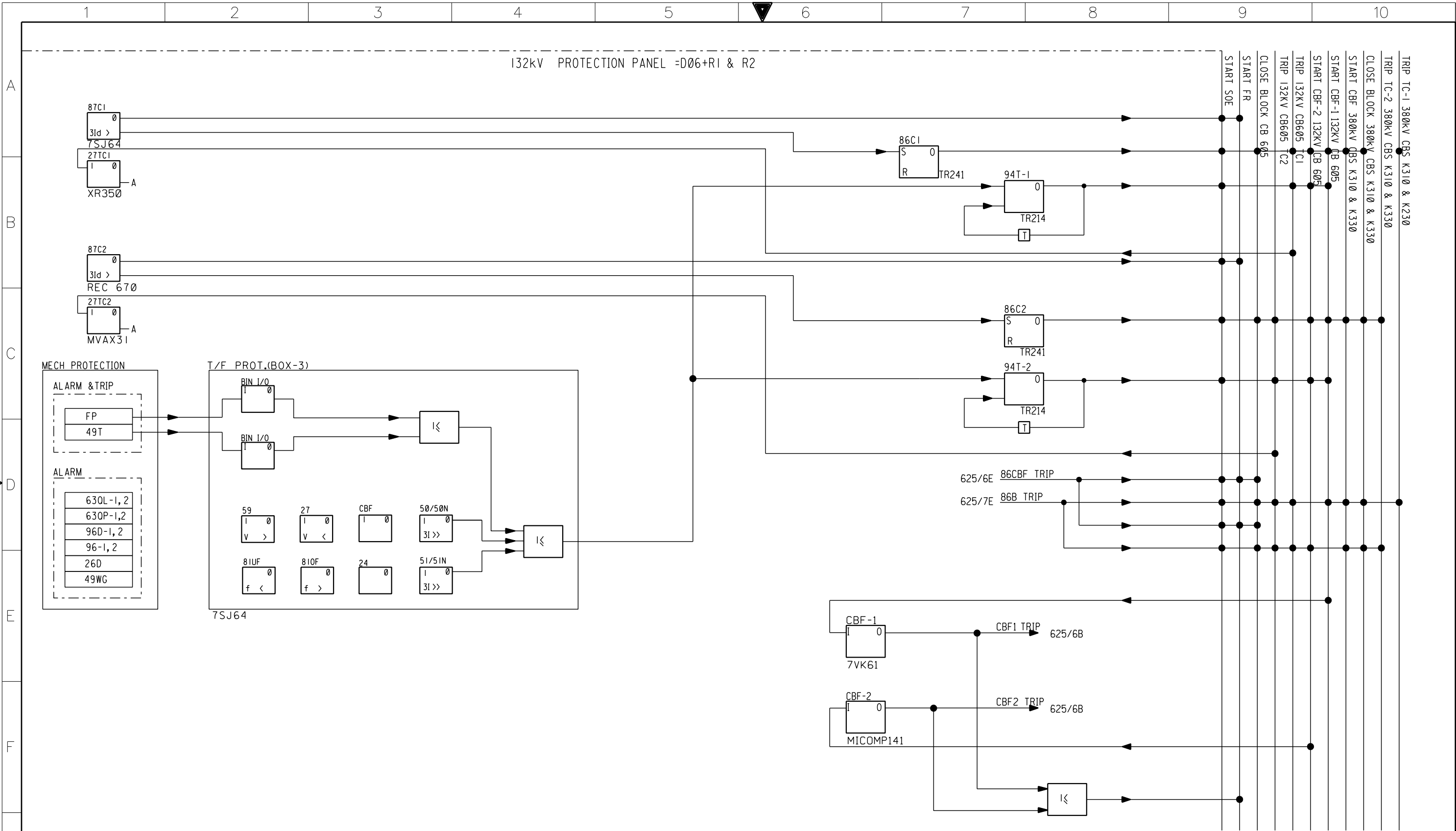


الشركة السعودية للكهرباء

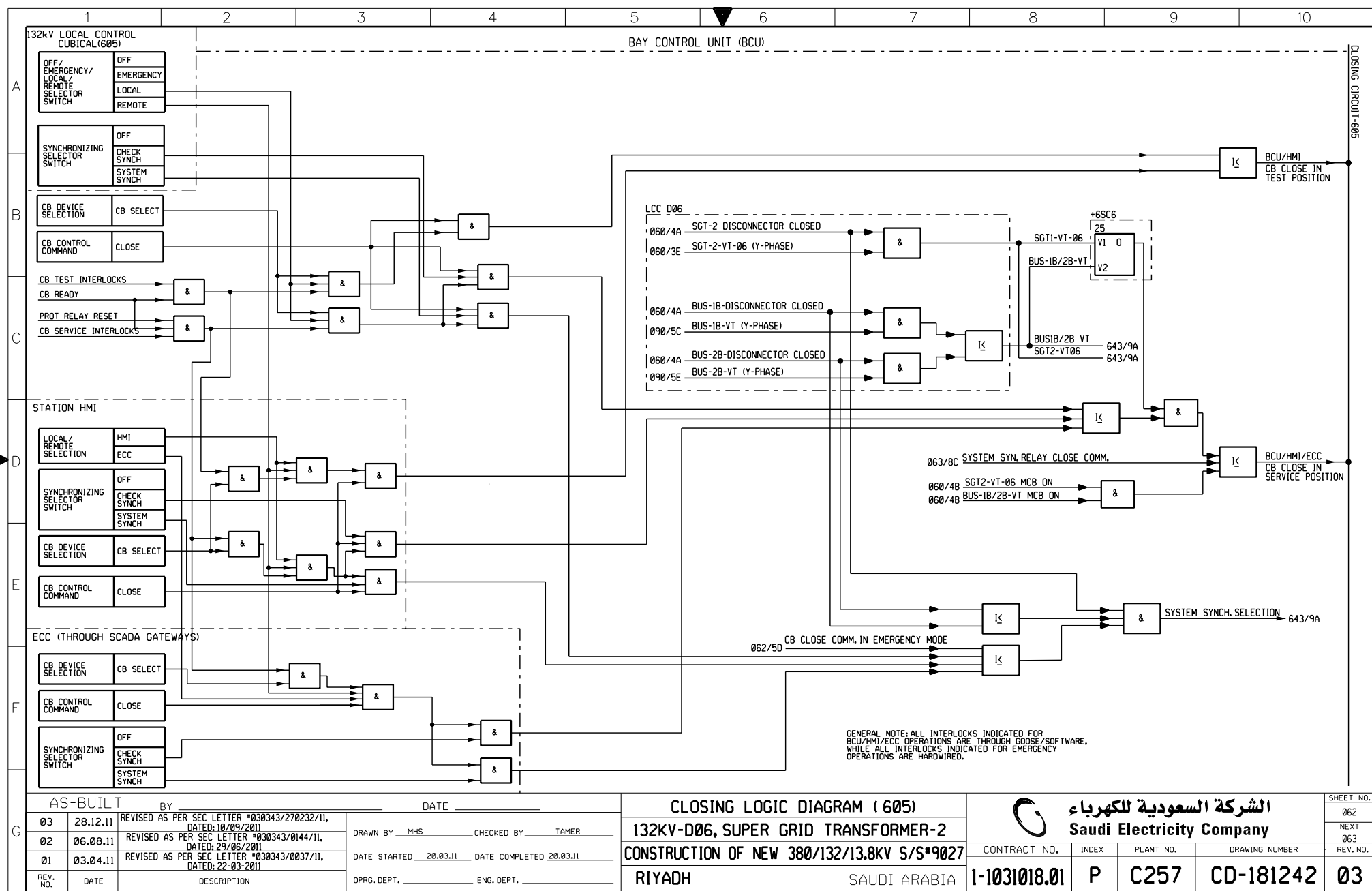
Saudi Electricity Company

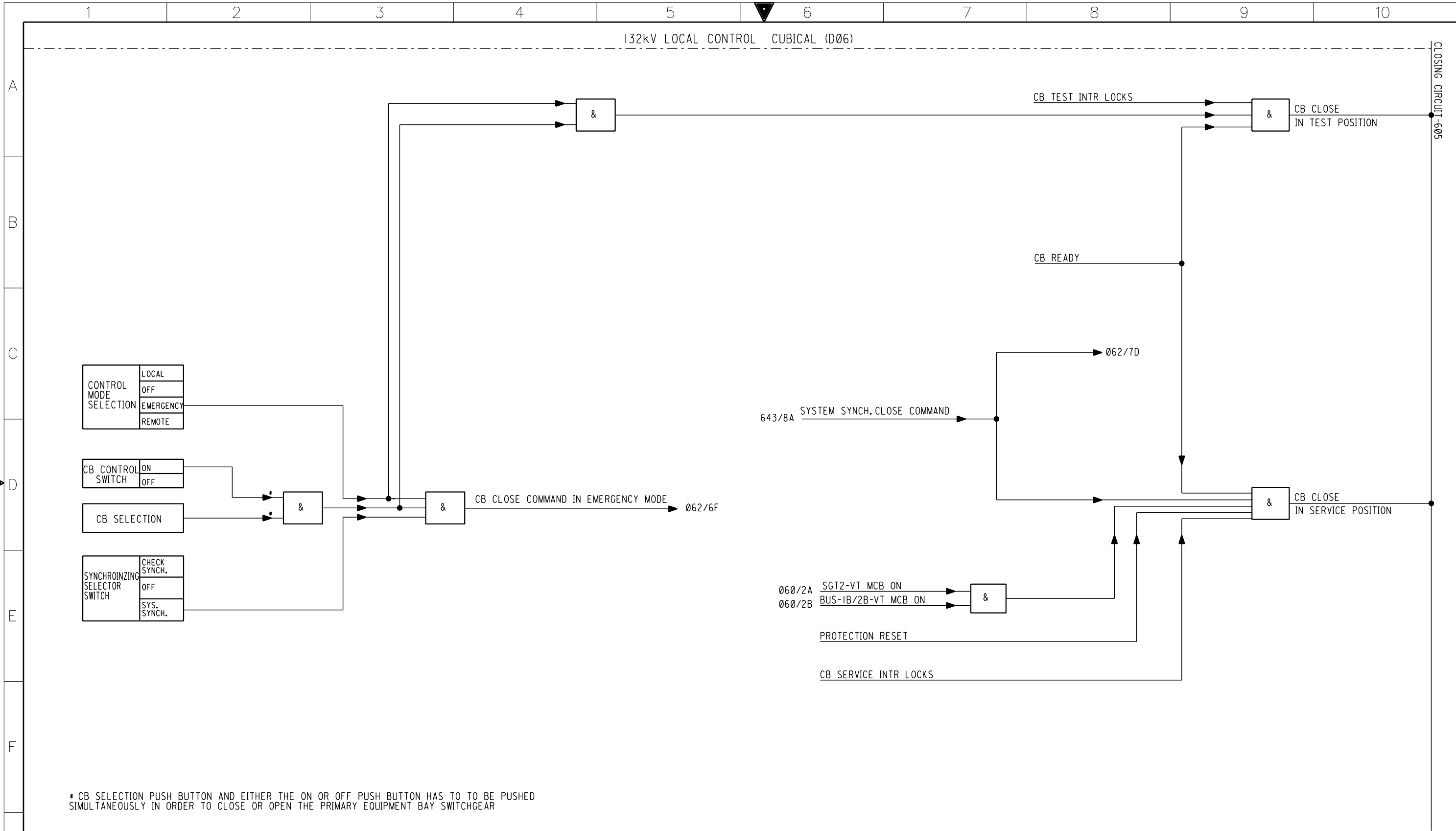
CONTRACT NO.	INDEX	PLANT NO.	DRAWING NUMBER	REV. NO.
1-1031018.01	P	C257	CD-181242	03

SHEET NO.
055
NEXT
060




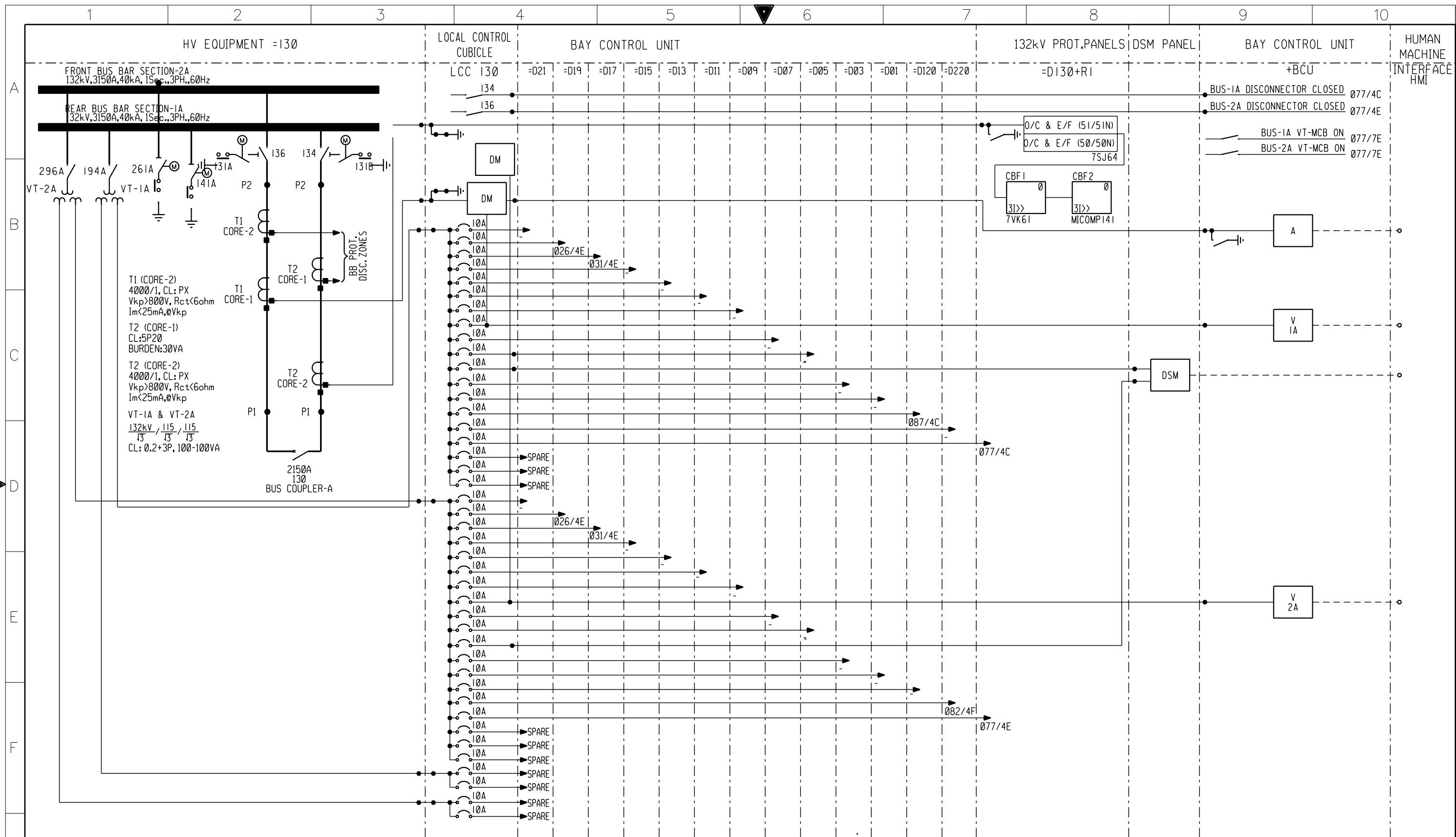
AS-BUILT				PROTECTION LOGIC DIAGRAM (DC CIRCUITS)				الشركة السعودية للكهرباء				SHEET NO.
BY _____				132KV-D06,SUPPER GRID TRANSFORMER-2				Saudi Electricity Company				061
03	28.12.11	REVISED AS PER SEC LETTER #030343/270232/11, DATED: 10/09/2011	DATE _____	CONSTRUCTION OF NEW 380/132/13.8KV S/S#9027				DRAWING NUMBER				REV. NO.
02	06.08.11	REVISED AS PER SEC LETTER #030343/0144/11, DATED: 29/06/2011	DRAWN BY _____ CHECKED BY _____ TAMER	SAUDI ARABIA				CD-181242				062
01	03.04.11	REVISED AS PER SEC LETTER #030343/0037/11, DATED: 22-03-2011	DATE STARTED _____ DATE COMPLETED _____ 20.03.11	RIYADH				03				
REV. NO.	DATE	DESCRIPTION	OPRG. DEPT. _____ ENG. DEPT. _____	1-1031018.01				C257				





* CB SELECTION PUSH BUTTON AND EITHER THE ON OR OFF PUSH BUTTON HAS TO TO BE PUSHED SIMULTANEOUSLY IN ORDER TO CLOSE OR OPEN THE PRIMARY EQUIPMENT BAY SWITCHGEAR


AS-BUILT				BY _____				DATE _____				CLOSING LOGIC DIAGRAM (605)				 الشركة السعودية للكهرباء Saudi Electricity Company				SHEET NO.	
03	28.12.11	REVISED AS PER SEC LETTER #030343/270232/11, DATED: 10/09/2011		DRAWN BY MHS		CHECKED BY TAMER		132KV-D06,SUPPER GRID TRANSFORMER-2		CONTRACT NO.		INDEX		PLANT NO.		DRAWING NUMBER		REV. NO.		063	
02	06.08.11	REVISED AS PER SEC LETTER #030343/0144/11, DATED: 29/06/2011		DATE STARTED 20.03.11		DATE COMPLETED 20.03.11		CONSTRUCTION OF NEW 380/132/13.8KV S/S#9027		1-1031018.01		P		C257		CD-181242		075			
01	03.04.11	REVISED AS PER SEC LETTER #030343/0037/11, DATED: 22-03-2011		OPRG. DEPT. _____		ENG. DEPT. _____		RIYADH SAUDI ARABIA										03			
REV. NO.	DATE	DESCRIPTION																			



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AS-BUILT				BY _____		DATE _____	
03	28.12.11	REVISED AS PER SEC LETTER #030343/270232/11, DATED: 10/09/2011		DRAWN BY	M.USMAN	CHECKED BY	TAMER
02	06.08.11	REVISED AS PER SEC LETTER #030343/0144/11, DATED: 29/06/2011		DATE STARTED	09.02.2011	DATE COMPLETED	
01	03.04.11	REVISED AS PER SEC LETTER #030343/0037/11, DATED: 22-03-2011		OPRG. DEPT.		ENG. DEPT.	
REV. NO.	DATE	DESCRIPTION					

PROTECTION LOGIC DIAGRAM (AC CIRCUITS)	
132kV-D130, BUS COUPLER-A	
CONSTRUCTION OF NEW 380/132/13.8KV S/S#9027	
RIYADH	SAUDI ARABIA



الشركة السعودية للكهرباء

Saudi Electricity Company

CONTRACT NO.	INDEX	PLANT NO.	DRAWING NUMBER	REV. NO.
1-1031018.01	P	C257	CD-181242	03

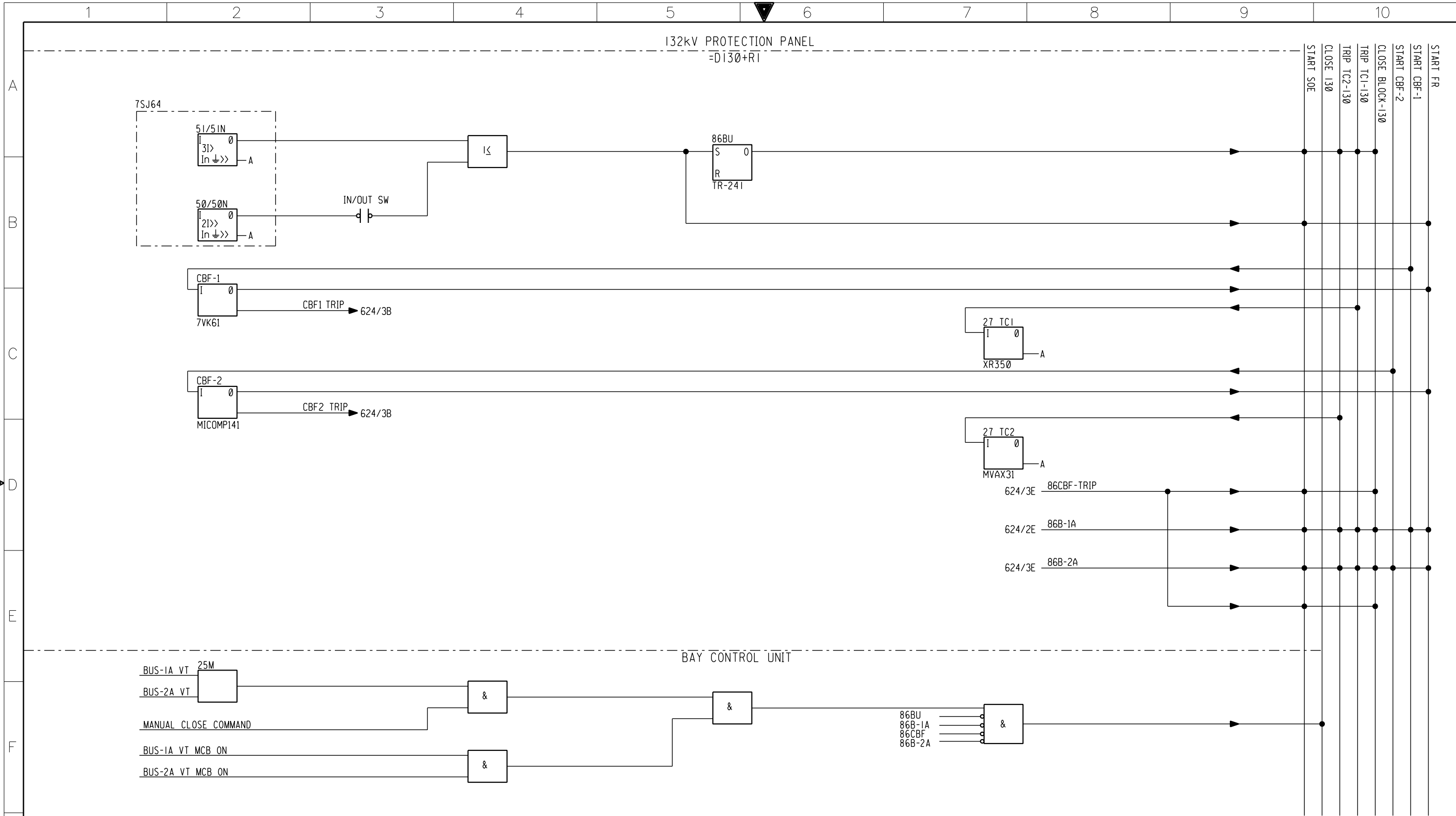


الشركة السعودية للكهرباء
Saudi Electricity Company

CONTRACT NO.	INDEX	PLANT NO.	DRAWING NUMBER	REV. NO.
1-1031018.01	P	C257	CD-181242	03

SEC/COA-D (2008/03)


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AS-BUILT			BY	DATE
03	28.12.11	REVISED AS PER SEC LETTER #030343/270232/11, DATED: 10/09/2011		
02	06.08.11	REVISED AS PER SEC LETTER #030343/0144/11, DATED: 29/06/2011	DRAWN BY M.USMAN	CHECKED BY TAMER
01	03.04.11	REVISED AS PER SEC LETTER #030343/0037/11, DATED: 22-03-2011	DATE STARTED 09.02.2011	DATE COMPLETED
REV. NO.	DATE	DESCRIPTION	OPRG. DEPT.	ENG. DEPT.

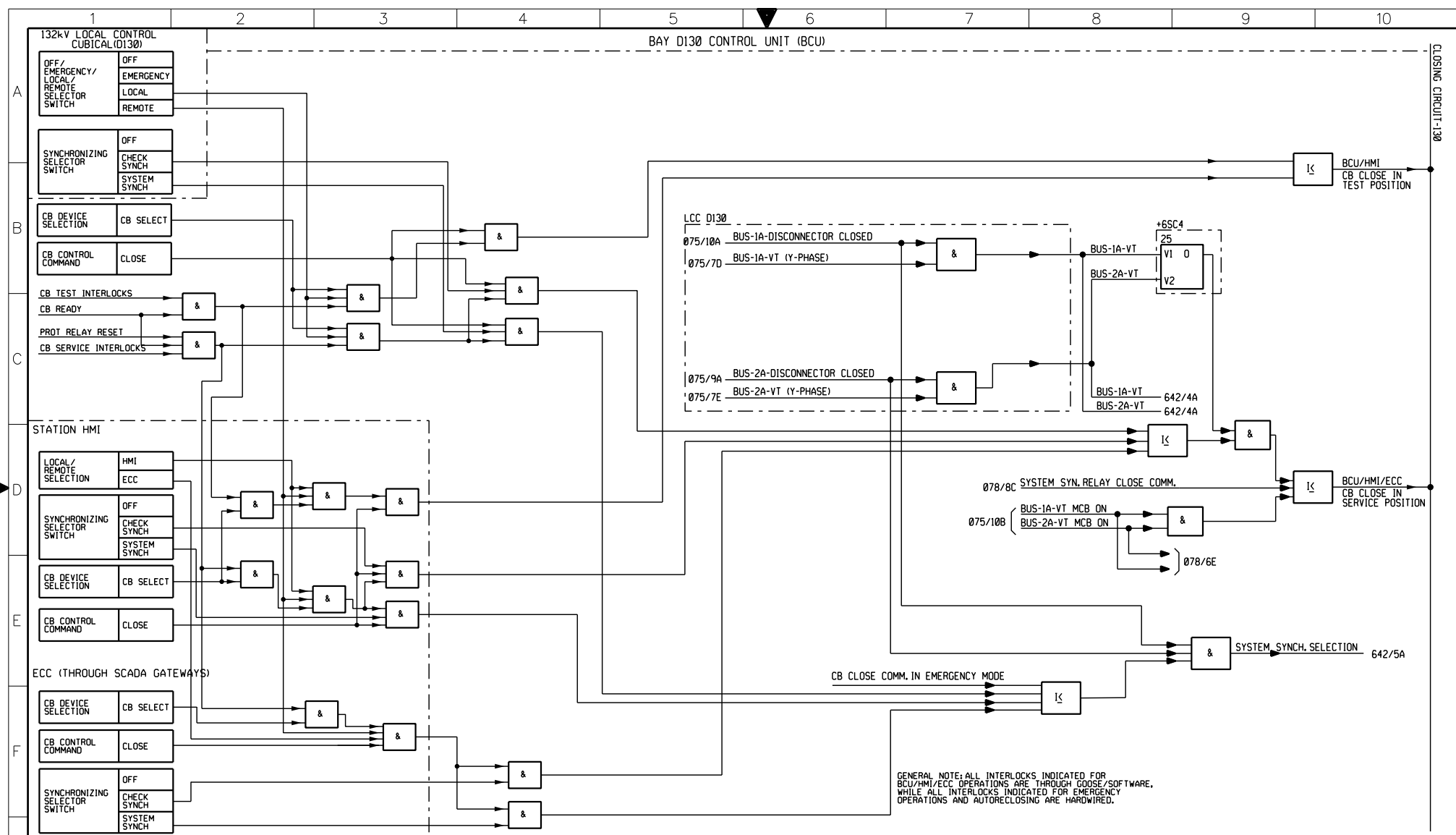
PROTECTION LOGIC DIAGRAM (DC CIRCUITS)	
132kV-D130, BUS COUPLER-A	
CONSTRUCTION OF NEW 380/132/13.8KV S/S#9027	
RIYADH	SAUDI ARABIA



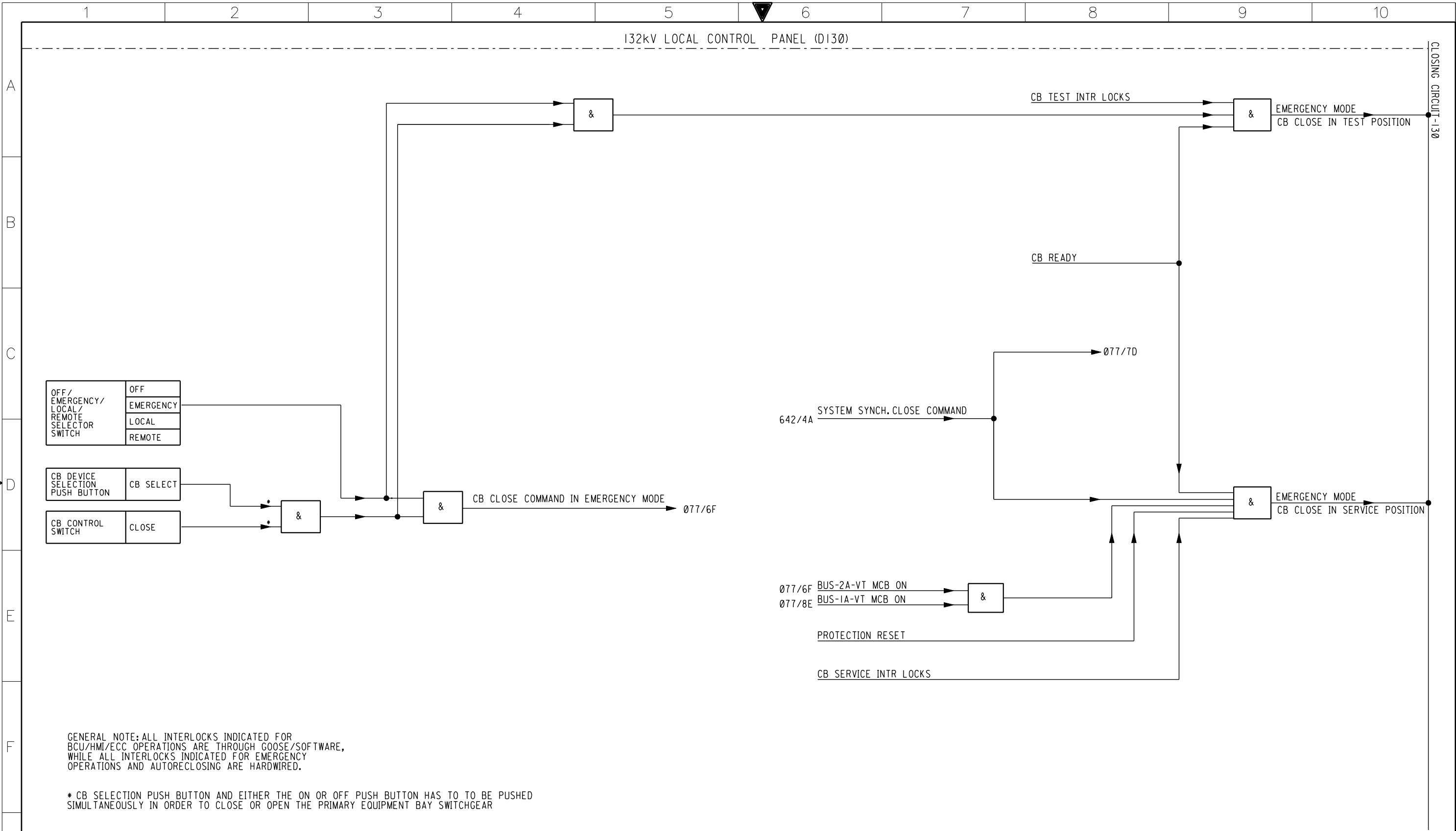
الشركة السعودية للكهرباء

Saudi Electricity Company

CONTRACT NO.	INDEX	PLANT NO.	DRAWING NUMBER	REV. NO.
1-1031018.01	P	C257	CD-181242	03




AS-BUILT				CLOSING LOGIC DIAGRAM (130)				الشركة السعودية للكهرباء				SHEET NO.
BY				132kV-D130, BUS COUPLER-A				Saudi Electricity Company				077
03	28.12.11	REVISED AS PER SEC LETTER #030343/270232/11, DATED: 10/09/2011	DRAWN BY MHS CHECKED BY TAMER	CONSTRUCTION OF NEW 380/132/13.8KV S/S*9027				CONTRACT NO.	INDEX	PLANT NO.	DRAWING NUMBER	REV. NO.
02	06.08.11	REVISED AS PER SEC LETTER #030343/0144/11, DATED: 29/06/2011	DATE STARTED 11.07.2011 DATE COMPLETED	RIYADH SAUDI ARABIA				1-1031018.01	P	C257	CD-181242	078
01	03.04.11	REVISED AS PER SEC LETTER #030343/0037/11, DATED: 22-03-2011	OPRG. DEPT. _____ ENG. DEPT. _____									079
REV. NO.	DATE	DESCRIPTION										



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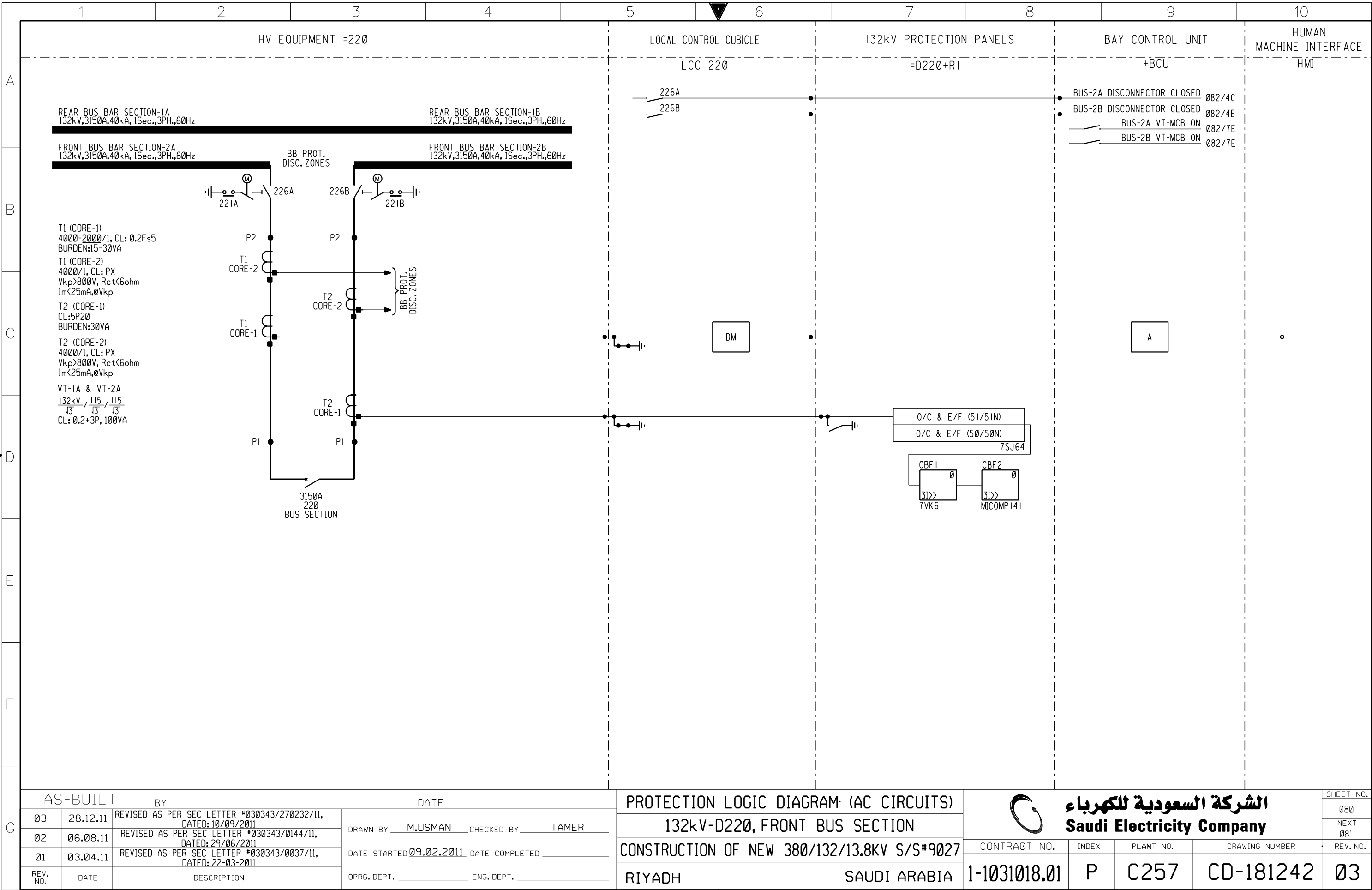
AS-BUILT			BY _____	DATE _____
03	28.12.11	REVISED AS PER SEC LETTER #030343/270232/11, DATED: 10/09/2011	DRAWN BY _____ MHS _____ CHECKED BY _____ TAMER	CLOSING LOGIC DIAGRAM (130) 132kV-D130, BUS COUPLER-A
02	06.08.11	REVISED AS PER SEC LETTER #030343/0144/11, DATED: 29/06/2011		
01	03.04.11	REVISED AS PER SEC LETTER #030343/0037/11, DATED: 22-03-2011	DATE STARTED 11.07.2011 DATE COMPLETED _____	CONSTRUCTION OF NEW 380/132/13.8KV S/S#9027
REV. NO.	DATE	DESCRIPTION	OPRG. DEPT. _____ ENG. DEPT. _____	RIYADH SAUDI ARABIA

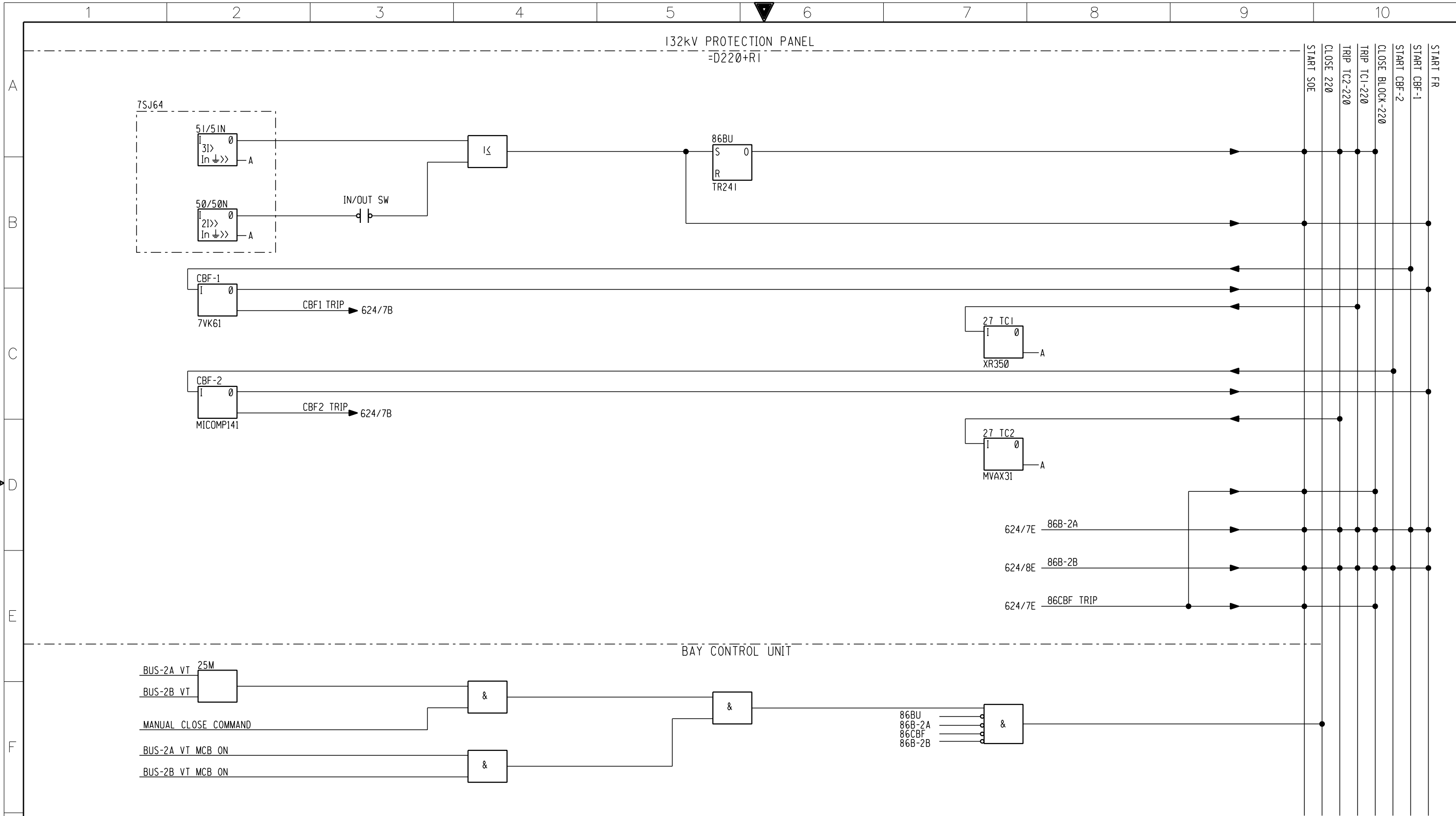



الشركة السعودية للكهرباء

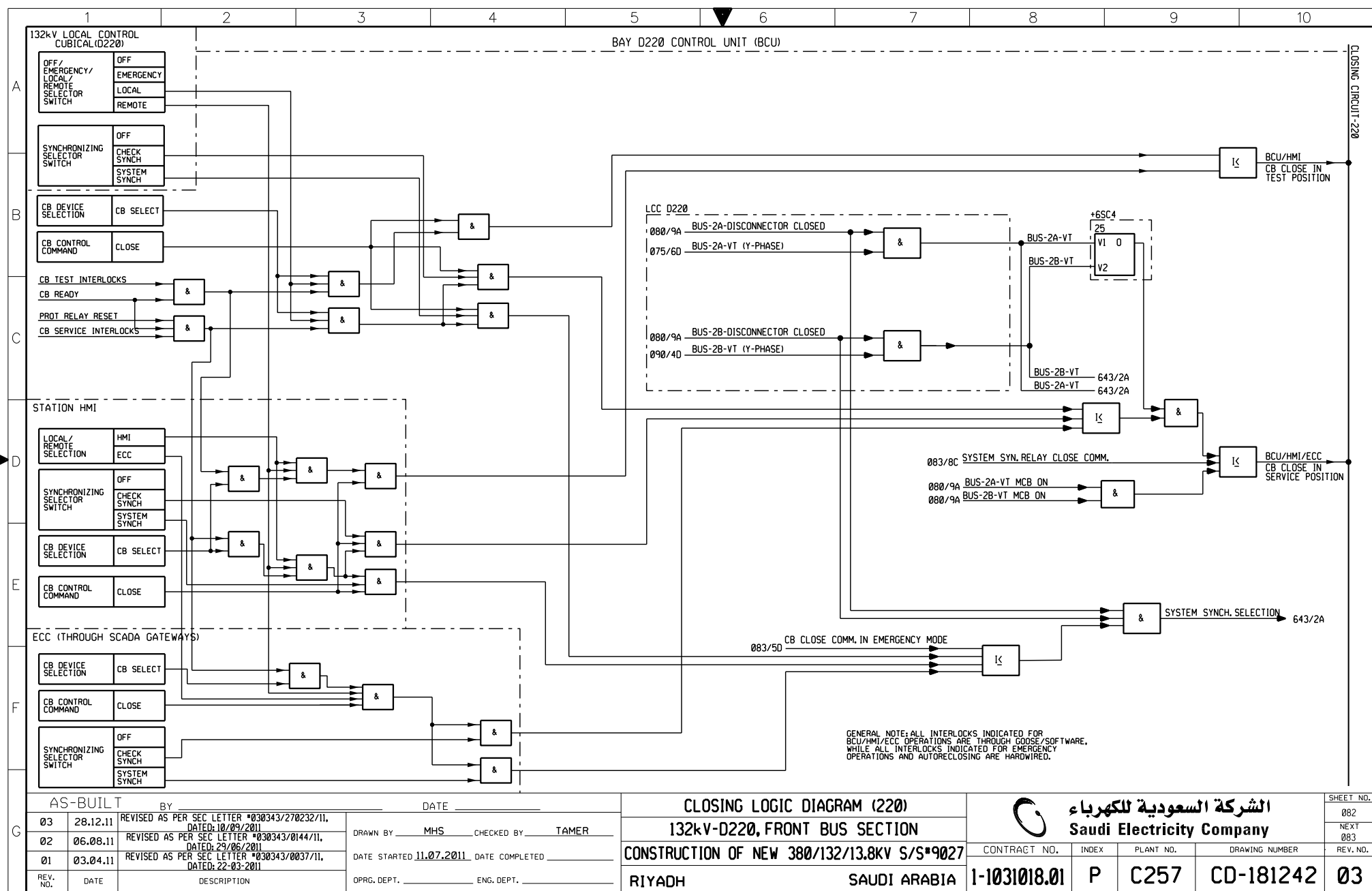
Saudi Electricity Company

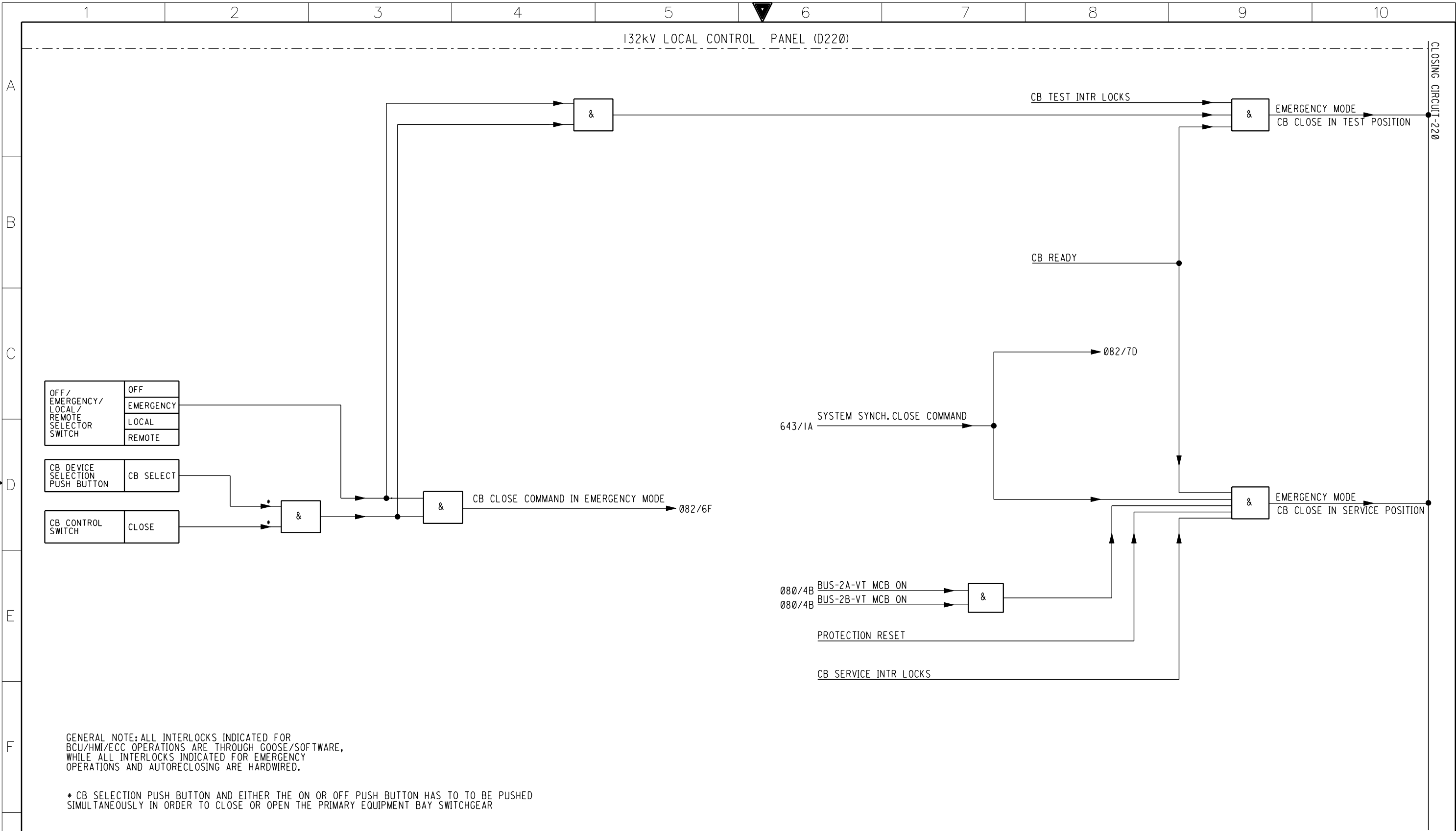
CONTRACT NO.	INDEX	PLANT NO.	DRAWING NUMBER	REV. NO.
1-1031018.01	P	C257	CD-181242	03





AS-BUILT BY _____ DATE _____				PROTECTION LOGIC DIAGRAM (DC CIRCUITS)		 الشركة السعودية للكهرباء Saudi Electricity Company				SHEET NO.
03	28.12.11	REVISED AS PER SEC LETTER #030343/270232/11, DATED: 10/09/2011		132kV-D220, FRONT BUS SECTION						081
02	06.08.11	REVISED AS PER SEC LETTER #030343/0144/11, DATED: 29/06/2011	DRAWN BY M.USMAN CHECKED BY TAMER	CONSTRUCTION OF NEW 380/132/13.8KV S/S#9027		CONTRACT NO.	INDEX	PLANT NO.	DRAWING NUMBER	NEXT 082
01	03.04.11	REVISED AS PER SEC LETTER #030343/0037/11, DATED: 22-03-2011	DATE STARTED 09.02.2011 DATE COMPLETED _____	RIYADH SAUDI ARABIA		1-1031018.01	P	C257	CD-181242	REV. NO.
REV. NO.	DATE	DESCRIPTION	OPRG. DEPT. _____ ENG. DEPT. _____							03






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AS-BUILT				BY _____		DATE _____	
03	28.12.11	REVISED AS PER SEC LETTER #030343/270232/11, DATED: 10/09/2011	DRAWN BY _____ MHS _____ CHECKED BY _____ TAMER _____				
02	06.08.11	REVISED AS PER SEC LETTER #030343/0144/11, DATED: 29/06/2011	DATE STARTED 11.07.2011 DATE COMPLETED _____				
01	03.04.11	REVISED AS PER SEC LETTER #030343/0037/11, DATED: 22-03-2011	OPRG. DEPT. _____ ENG. DEPT. _____				
REV. NO.	DATE	DESCRIPTION					

CLOSING LOGIC DIAGRAM (220)	
132kV-D220, FRONT BUS SECTION	
CONSTRUCTION OF NEW 380/132/13.8KV S/S#9027	
RIYADH	SAUDI ARABIA

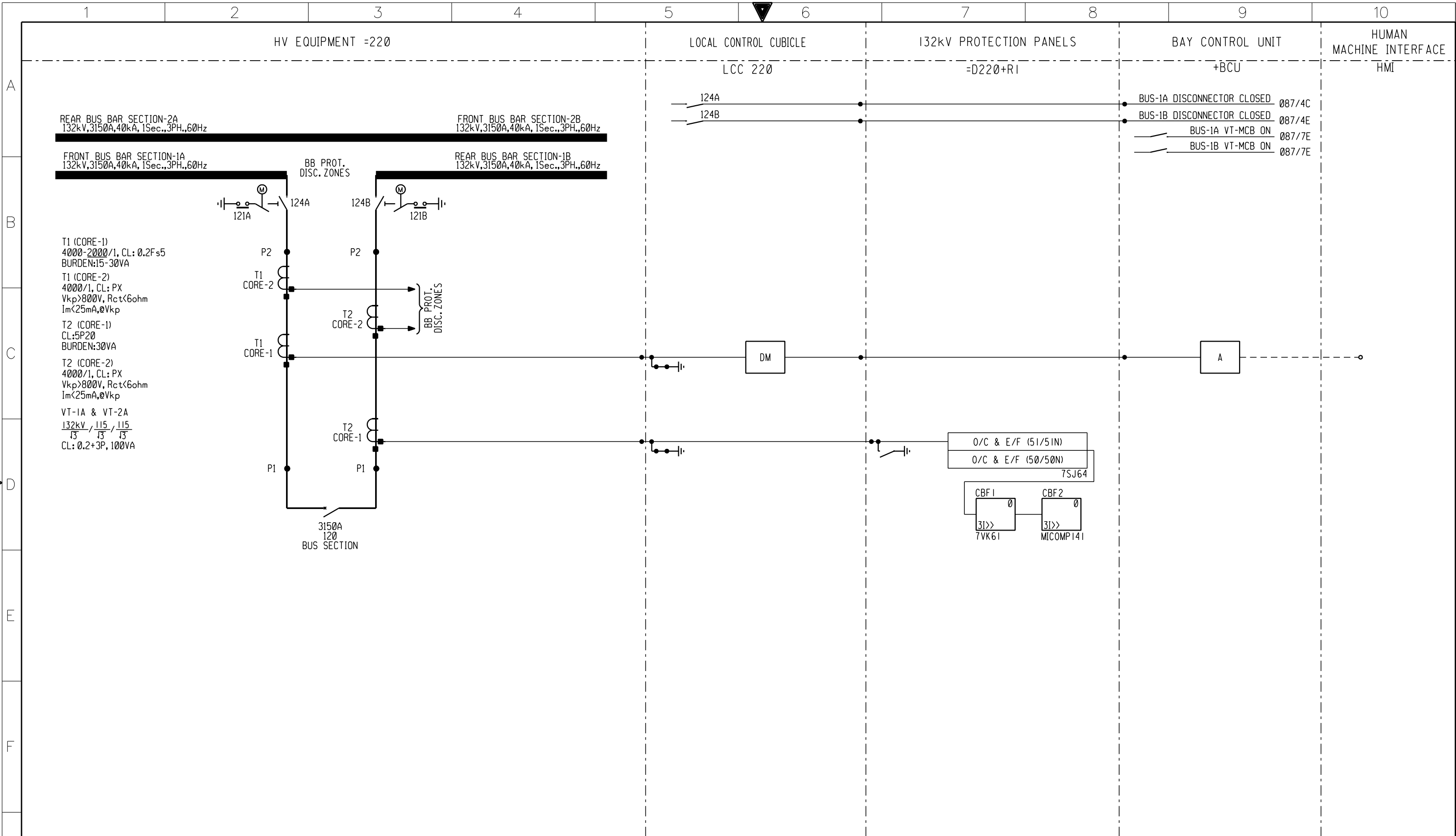


الشركة السعودية للكهرباء

Saudi Electricity Company

CONTRACT NO.	INDEX	PLANT NO.	DRAWING NUMBER	REV. NO.
1-1031018.01	P	C257	CD-181242	03


SHEET NO.
083
NEXT
085



G

AS-BUILT			BY _____		DATE _____	
03	28.12.11	REVISED AS PER SEC LETTER #030343/270232/11, DATED: 10/09/2011	DRAWN BY _____ M.USMAN _____ CHECKED BY _____ TAMER _____			
02	06.08.11	REVISED AS PER SEC LETTER #030343/0144/11, DATED: 29/06/2011	DATE STARTED 09.02.2011 DATE COMPLETED _____			
01	03.04.11	REVISED AS PER SEC LETTER #030343/0037/11, DATED: 22-03-2011	OPRG. DEPT. _____ ENG. DEPT. _____			
REV. NO.	DATE	DESCRIPTION				

PROTECTION LOGIC DIAGRAM (AC CIRCUITS)	
132kV-D120, REAR BUS SECTION	
CONSTRUCTION OF NEW 380/132/13.8KV S/S#9027	
RIYADH	SAUDI ARABIA

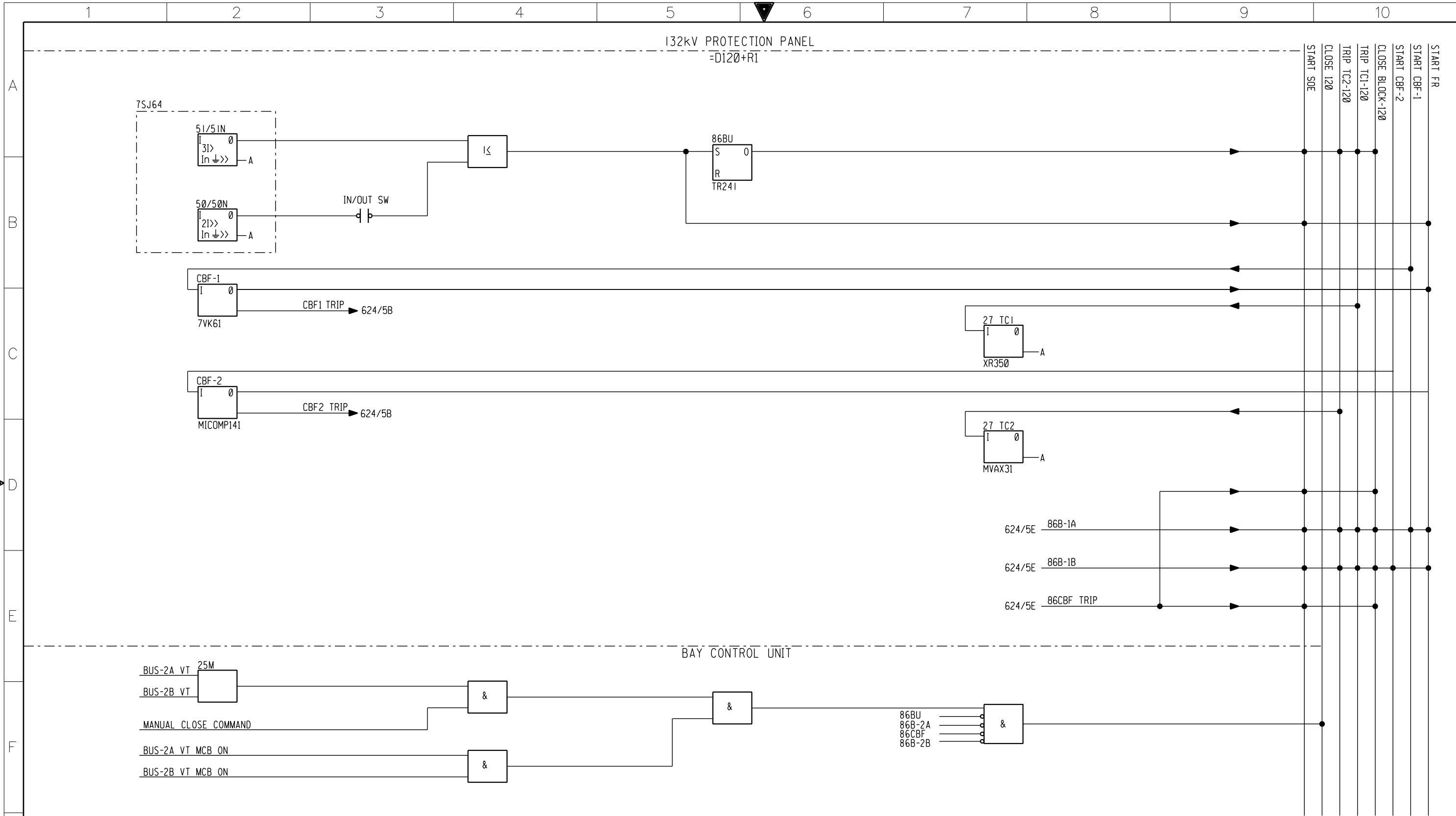


الشركة السعودية للكهرباء

Saudi Electricity Company

CONTRACT NO.	INDEX	PLANT NO.	DRAWING NUMBER	REV. NO.
1-1031018.01	P	C257	CD-181242	03


SHEET NO.
085
NEXT
086



G

AS-BUILT			BY	DATE
03	28.12.11	REVISED AS PER SEC LETTER #030343/270232/11, DATED: 10/09/2011		
02	06.08.11	REVISED AS PER SEC LETTER #030343/0144/11, DATED: 29/06/2011	DRAWN BY M.USMAN	CHECKED BY TAMER
01	03.04.11	REVISED AS PER SEC LETTER #030343/0037/11, DATED: 22-03-2011	DATE STARTED 09.02.2011	DATE COMPLETED
REV. NO.	DATE	DESCRIPTION	OPRG. DEPT.	ENG. DEPT.

PROTECTION LOGIC DIAGRAM (DC CIRCUITS)	
132kV-D120, REAR BUS SECTION	
CONSTRUCTION OF NEW 380/132/13.8KV S/S#9027	
RIYADH	SAUDI ARABIA

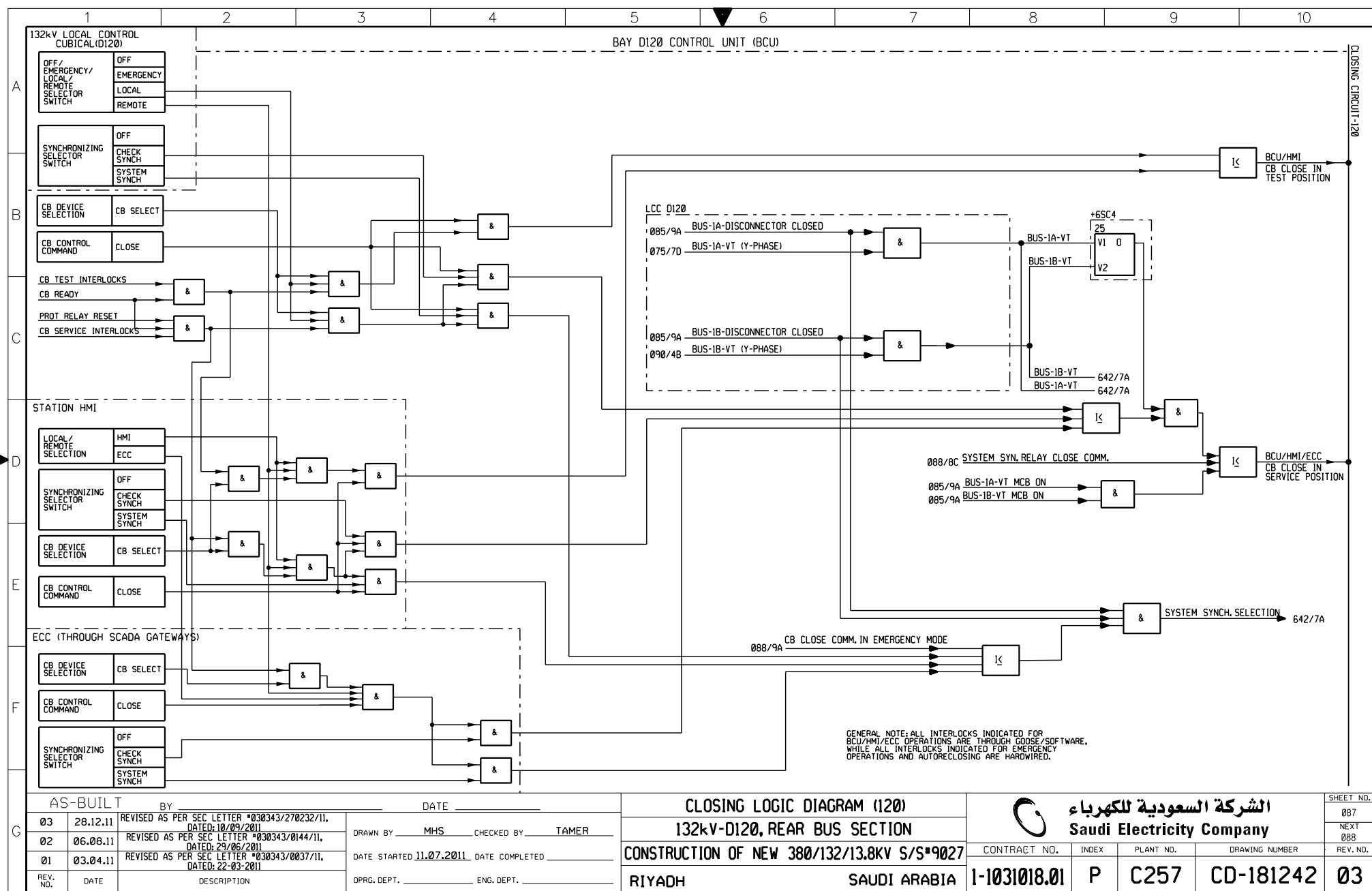


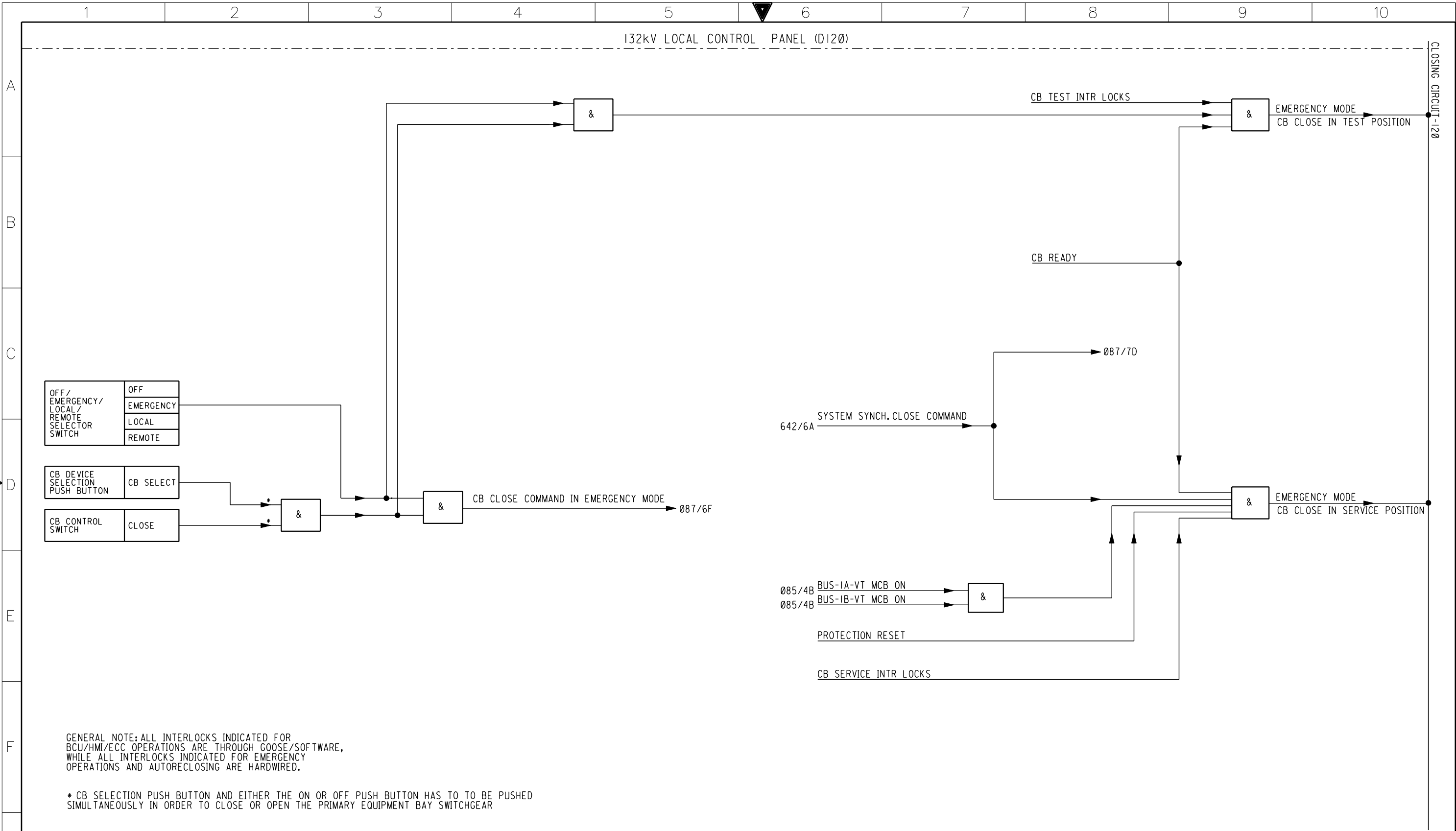
الشركة السعودية للكهرباء

Saudi Electricity Company

CONTRACT NO.	INDEX	PLANT NO.	DRAWING NUMBER	REV. NO.
1-1031018.01	P	C257	CD-181242	03


SHEET NO.
086
NEXT
087





G

AS-BUILT				BY _____		DATE _____	
03	28.12.11	REVISED AS PER SEC LETTER #030343/270232/11, DATED: 10/09/2011	DRAWN BY _____ MHS _____ CHECKED BY _____ TAMER	CLOSING LOGIC DIAGRAM (120) 132kV-D120, REAR BUS SECTION CONSTRUCTION OF NEW 380/132/13.8KV S/S#9027 RIYADH SAUDI ARABIA			
02	06.08.11	REVISED AS PER SEC LETTER #030343/0144/11, DATED: 29/06/2011					
01	03.04.11	REVISED AS PER SEC LETTER #030343/0037/11, DATED: 22-03-2011					
REV. NO.	DATE	DESCRIPTION	OPRG. DEPT. _____ ENG. DEPT. _____				



الشركة السعودية للكهرباء

Saudi Electricity Company

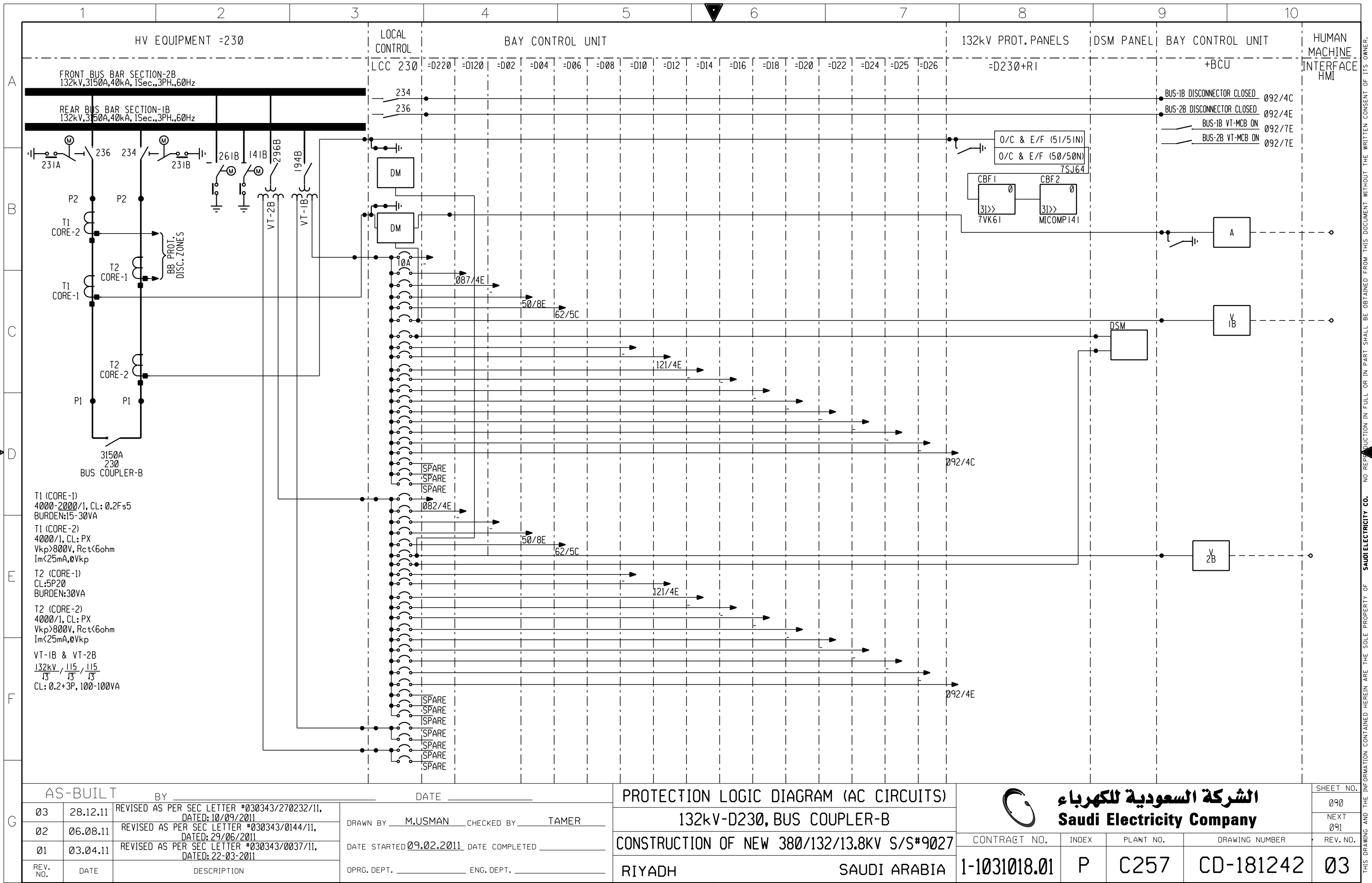
CONTRACT NO.	INDEX	PLANT NO.	DRAWING NUMBER	REV. NO.
1-1031018.01	P	C257	CD-181242	03

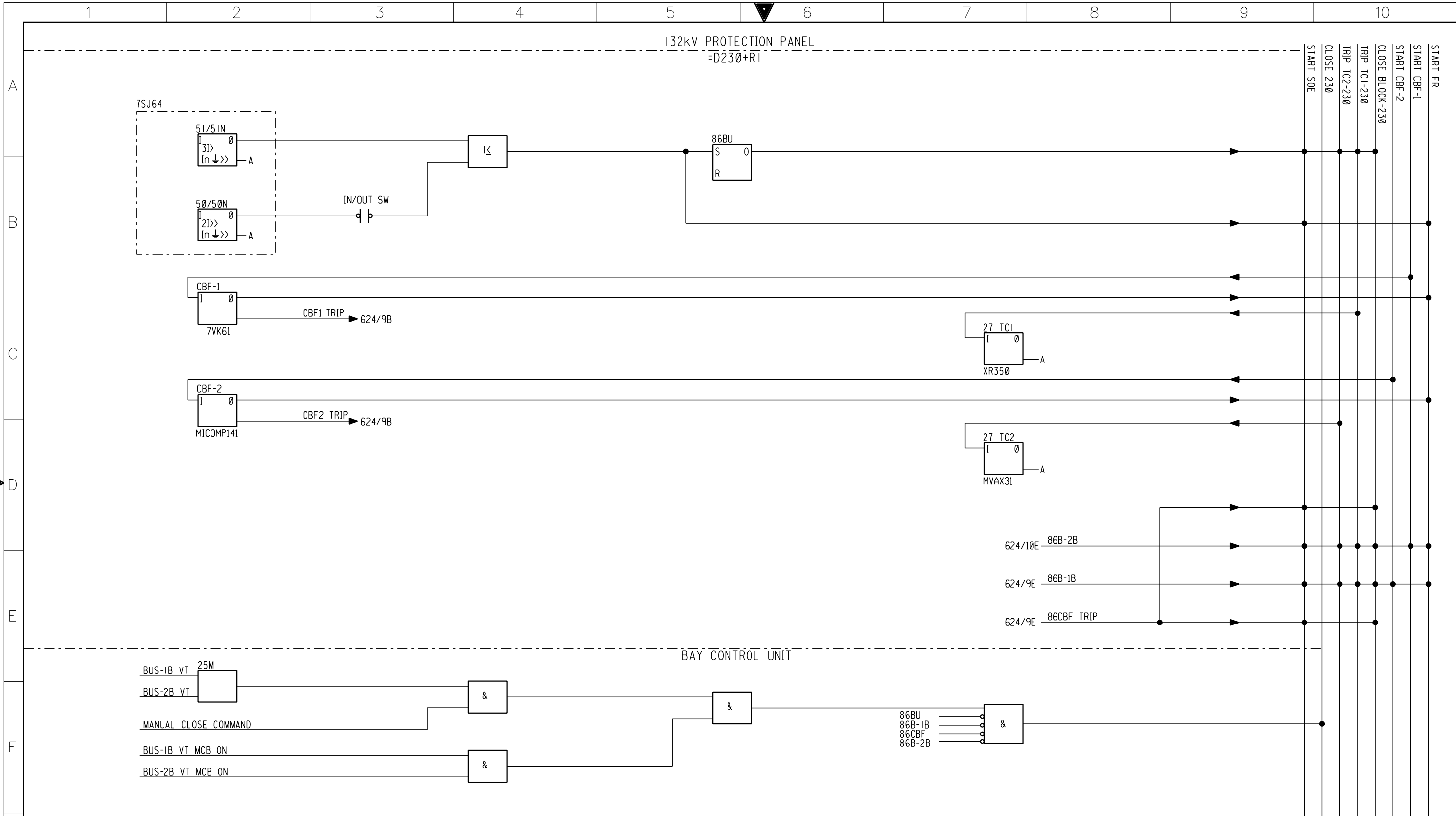
SHEET NO.

088

NEXT

090






G

AS-BUILT				BY _____		DATE _____	
03	28.12.11	REVISED AS PER SEC LETTER #030343/270232/11, DATED: 10/09/2011	DRAWN BY <u>M.USMAN</u> CHECKED BY <u>TAMER</u>				
02	06.08.11	REVISED AS PER SEC LETTER #030343/0144/11, DATED: 29/06/2011	DATE STARTED <u>09.02.2011</u> DATE COMPLETED _____				
01	03.04.11	REVISED AS PER SEC LETTER #030343/0037/11, DATED: 22-03-2011	OPRG. DEPT. _____ ENG. DEPT. _____				
REV. NO.	DATE	DESCRIPTION					

PROTECTION LOGIC DIAGRAM (DC CIRCUITS)	
132kV-D230, BUS COUPLER-B	
CONSTRUCTION OF NEW 380/132/13.8KV S/S#9027	
RIYADH	SAUDI ARABIA

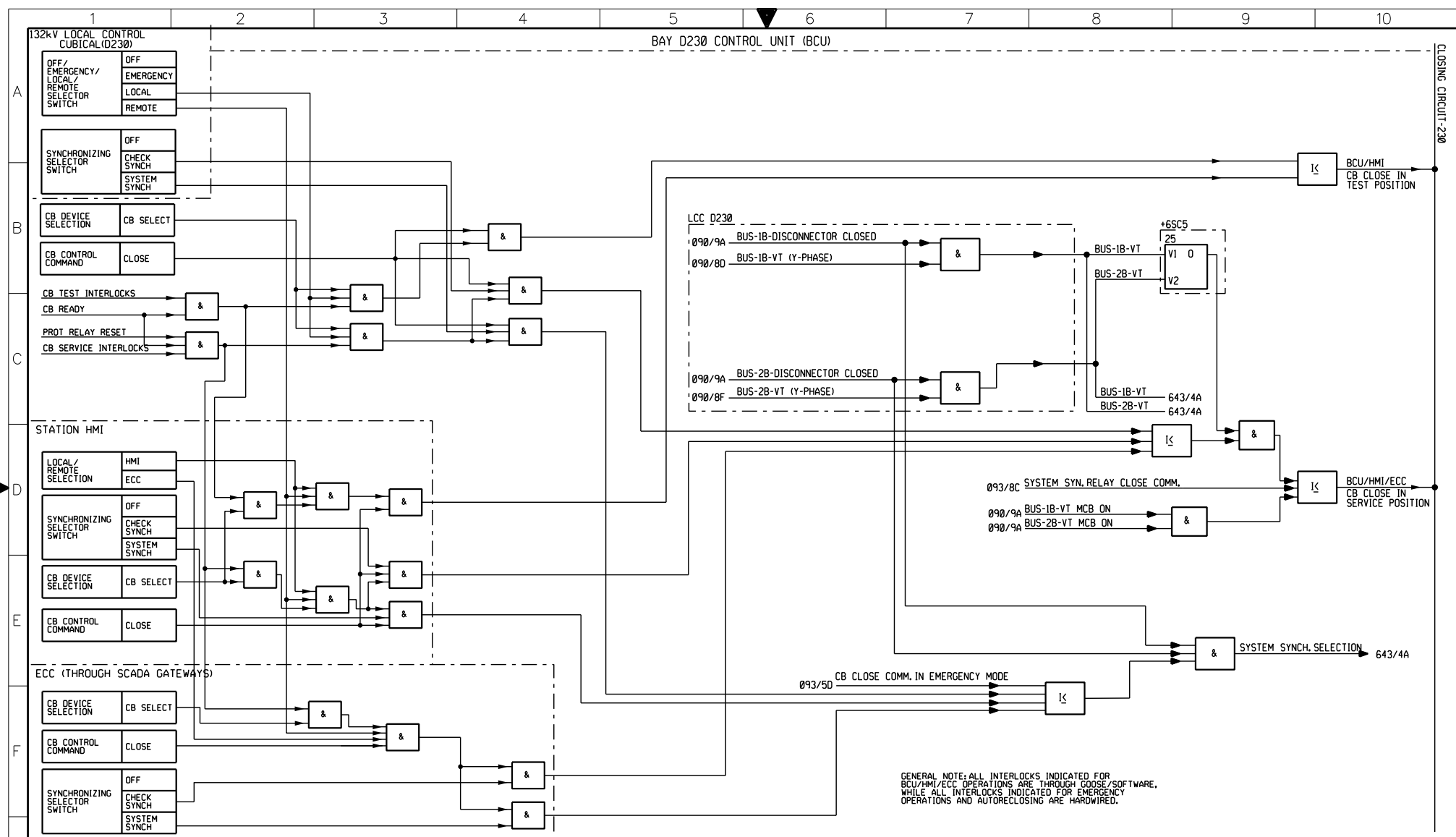



الشركة السعودية للكهرباء

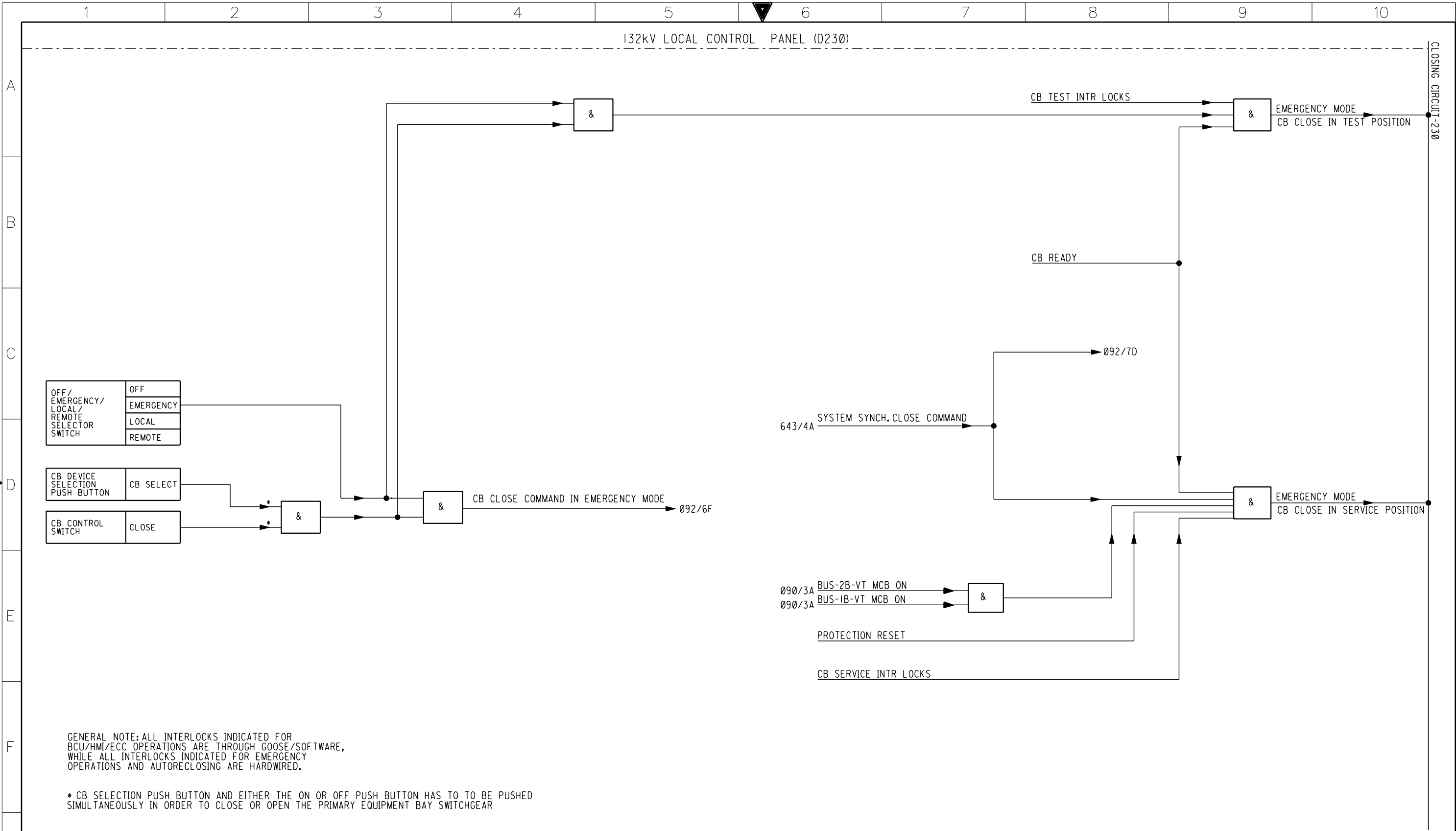
Saudi Electricity Company


CONTRACT NO.	INDEX	PLANT NO.	DRAWING NUMBER	REV. NO.
1-1031018.01	P	C257	CD-181242	03

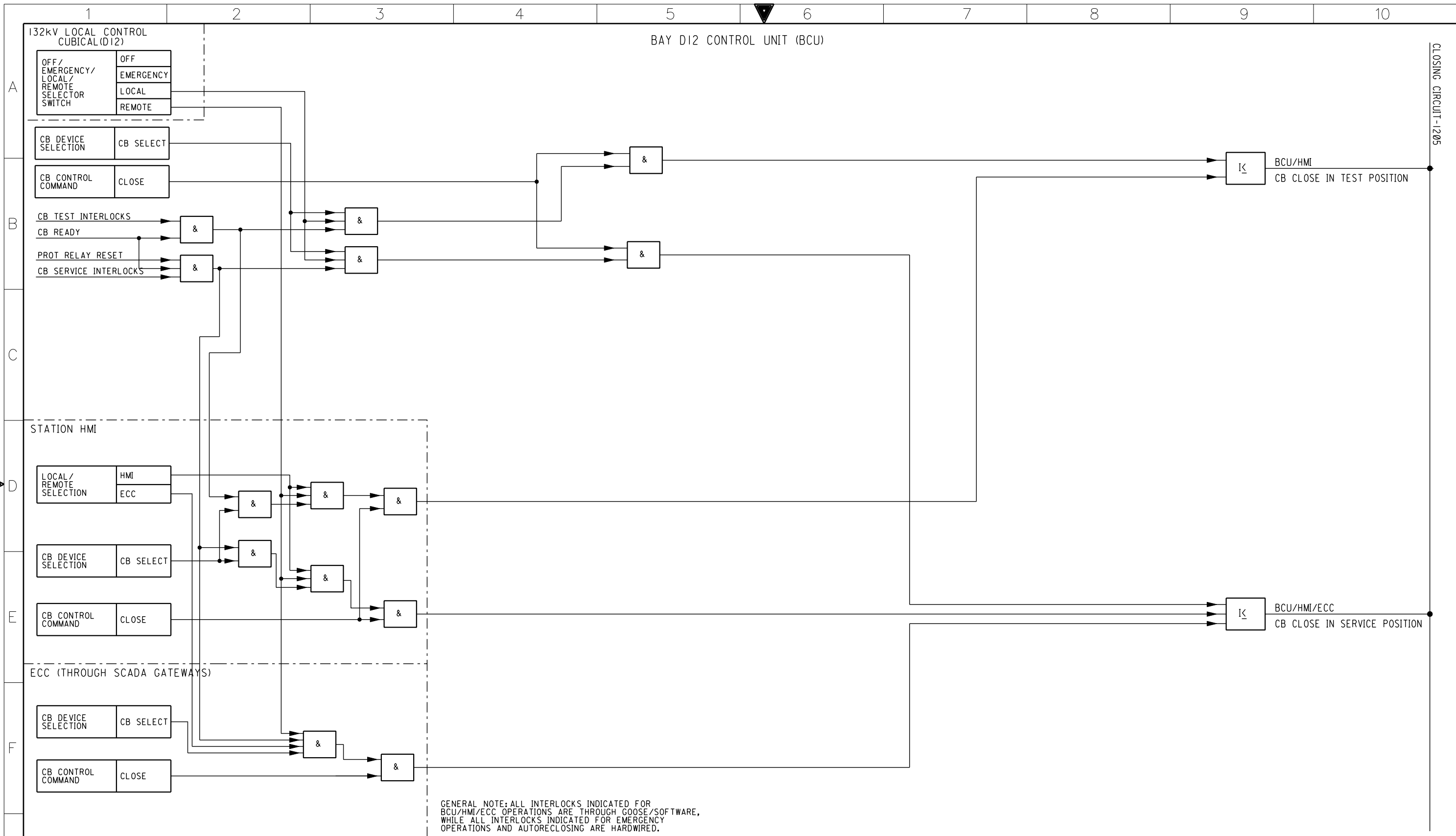
SHEET NO.
091
NEXT
092



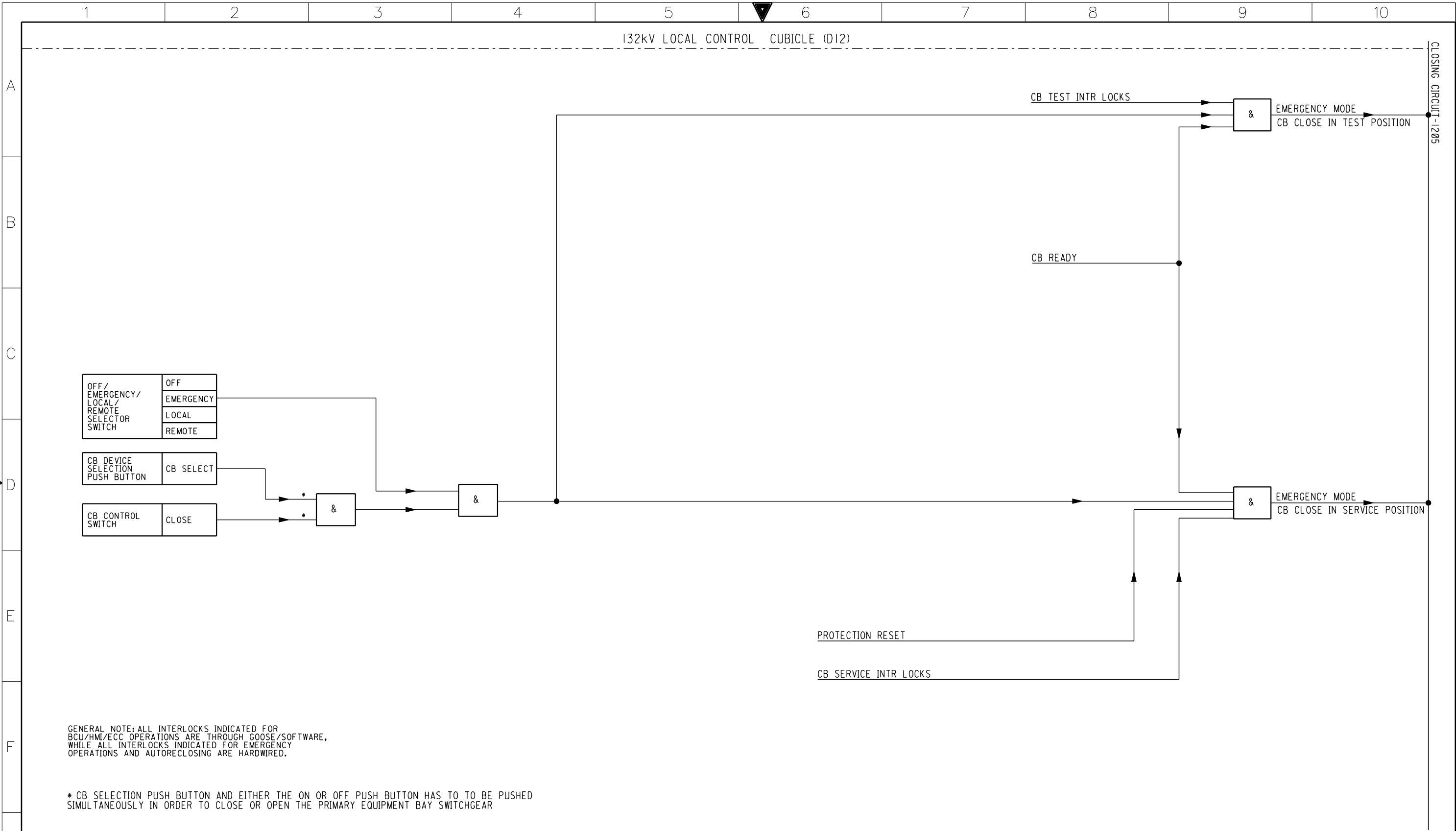
G	AS-BUILT			BY	DATE		CLOSING LOGIC DIAGRAM (230)				 <div>الشركة السعودية للكهرباء Saudi Electricity Company</div>				SHEET NO.
	03	28.12.11	REVISED AS PER SEC LETTER *030343/270232/11, DATED: 10/09/2011	DRAWN BY	MHS	CHECKED BY	TAMER	132kV-D230, BUS COUPLER-B							092
	02	06.08.11	REVISED AS PER SEC LETTER *030343/0144/11, DATED: 29/06/2011					CONSTRUCTION OF NEW 380/132/13.8KV S/S*9027				093			
	01	03.04.11	REVISED AS PER SEC LETTER *030343/0037/11, DATED: 22-03-2011					RIYADH SAUDI ARABIA				03			
	REV. NO.	DATE	DESCRIPTION					OPRG. DEPT.	ENG. DEPT.	CONTRACT NO.	INDEX	PLANT NO.	DRAWING NUMBER	REV. NO.	
										1-1031018.01	P	C257	CD-181242	03	



AS-BUILT				CLOSING LOGIC DIAGRAM (230)				 الشركة السعودية للكهرباء Saudi Electricity Company		SHEET NO.	
03	28.12.11	REVISED AS PER SEC LETTER #030343/270232/11, DATED: 10/09/2011	DATE	132kV-D230, BUS COUPLER-B	CONSTRUCTION OF NEW 380/132/13.8KV S/S#9027		CONTRACT NO.	INDEX	PLANT NO.	DRAWING NUMBER	REV. NO.
02	06.08.11	REVISED AS PER SEC LETTER #030343/0144/11, DATED: 29/06/2011	DATE	RIYADH SAUDI ARABIA	1-1031018.01		P	C257	CD-181242	03	093
01	03.04.11	REVISED AS PER SEC LETTER #030343/0037/11, DATED: 22-03-2011	DATE								
REV. NO.	DATE	DESCRIPTION	OPRG. DEPT.	ENG. DEPT.							




AS-BUILT				CLOSING LOGIC DIAGRAM (1205)				الشركة السعودية للكهرباء		SHEET NO.	
BY				132kV-D12, SPARE FUTURE SVC				Saudi Electricity Company		121	
03	28.12.11	REVISED AS PER SEC LETTER #030343/270232/11, DATED: 10/09/2011	DRAWN BY MHS CHECKED BY TAMER	CONSTRUCTION OF NEW 380/132/13.8KV S/S#9027				CONTRACT NO.	INDEX	PLANT NO.	DRAWING NUMBER
02	06.08.11	REVISED AS PER SEC LETTER #030343/0144/11, DATED: 29/06/2011	DATE STARTED 11.07.2011 DATE COMPLETED	RIYADH SAUDI ARABIA				1-1031018.01	P	C257	CD-181242
01	03.04.11	REVISED AS PER SEC LETTER #030343/0037/11, DATED: 22-03-2011	OPRG. DEPT. ENG. DEPT.								
REV. NO.	DATE	DESCRIPTION									



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AS-BUILT				BY _____		DATE _____	
03	28.12.11	REVISED AS PER SEC LETTER #030343/270232/11, DATED: 10/09/2011	DRAWN BY _____ MHS _____ CHECKED BY _____ TAMER _____	CLOSING LOGIC · DIAGRAM (1205) 132kV-D12, SPARE FUTURE SVC CONSTRUCTION OF NEW 380/132/13.8KV S/S#9027 RIYADH SAUDI ARABIA			
02	06.08.11	REVISED AS PER SEC LETTER #030343/0144/11, DATED: 29/06/2011					
01	03.04.11	REVISED AS PER SEC LETTER #030343/0037/11, DATED: 22-03-2011					
REV. NO.	DATE	DESCRIPTION	OPRG. DEPT. _____				ENG. DEPT. _____

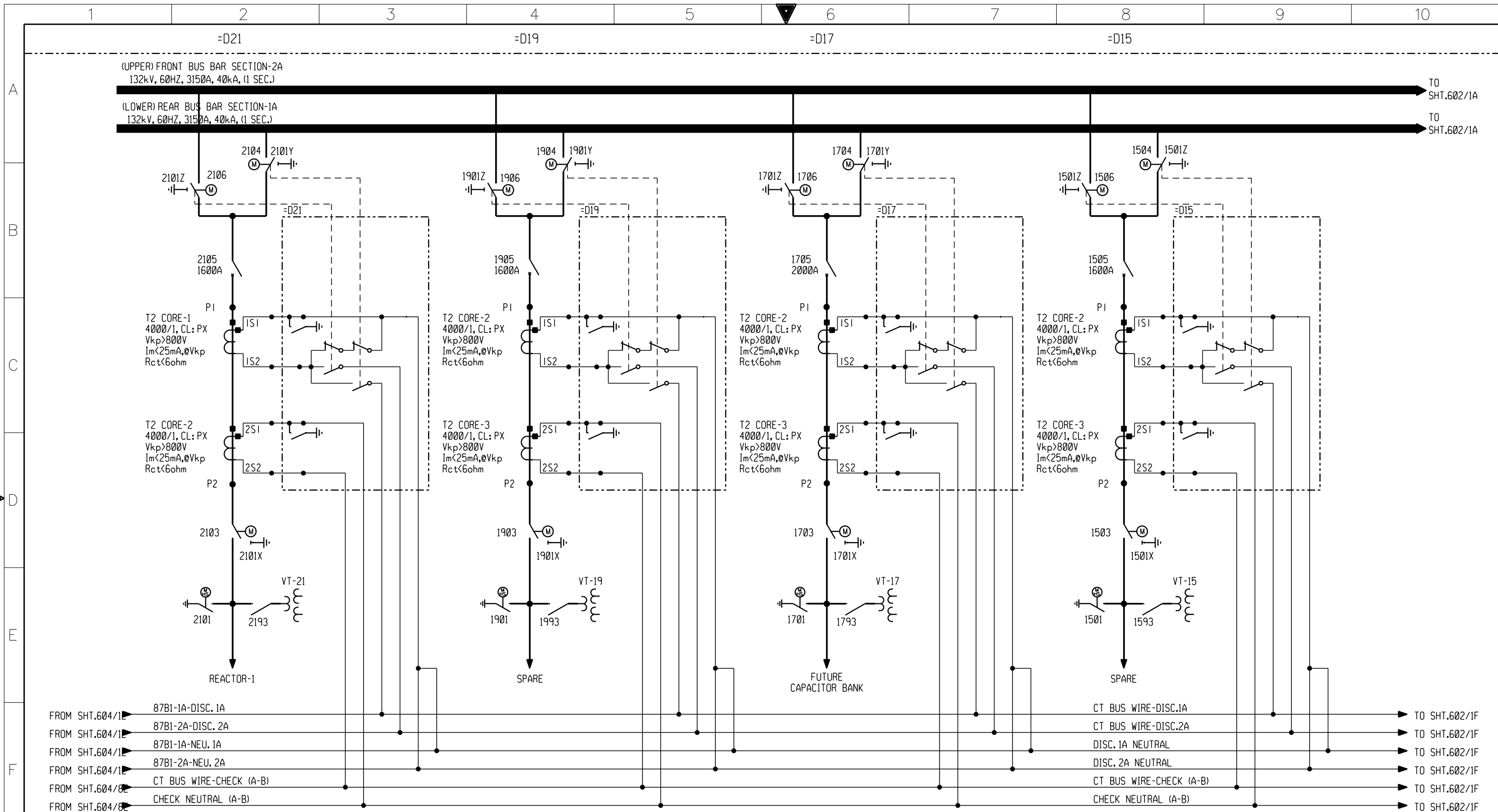


الشركة السعودية للكهرباء

Saudi Electricity Company

CONTRACT NO.	INDEX	PLANT NO.	DRAWING NUMBER	REV. NO.
1-1031018.01	P	C257	CD-181242	03

SHEET NO.	122	NEXT 601	REV. NO.
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NOTE: DIRECT AUX CONTACTS OF BUS ISOLATORS
TO BE USED FOR CT SWITCHING.

G

AS-BUILT			BY _____		DATE _____	
03	28.12.11	REVISED AS PER SEC LETTER #030343/270232/11, DATED: 10/09/2011				
02	06.08.11	REVISED AS PER SEC LETTER #030343/0144/11, DATED: 29/06/2011	DRAWN BY _____	ISHTIAD	CHECKED BY _____	YAHYA
01	03.04.11	REVISED AS PER SEC LETTER #030343/0037/11, DATED: 22-03-2011	DATE STARTED _____		29.01.2011 DATE COMPLETED _____	
REV. NO.	DATE	DESCRIPTION	OPRG. DEPT. _____		ENG. DEPT. _____	

PROTECTION LOGIC DIAGRAM (AC CIRCUITS)	
132KV BUSBAR PROTECTION	
CONSTRUCTION OF NEW 380/132/13.8KV S/S#9027	
RIYADH	SAUDI ARABIA

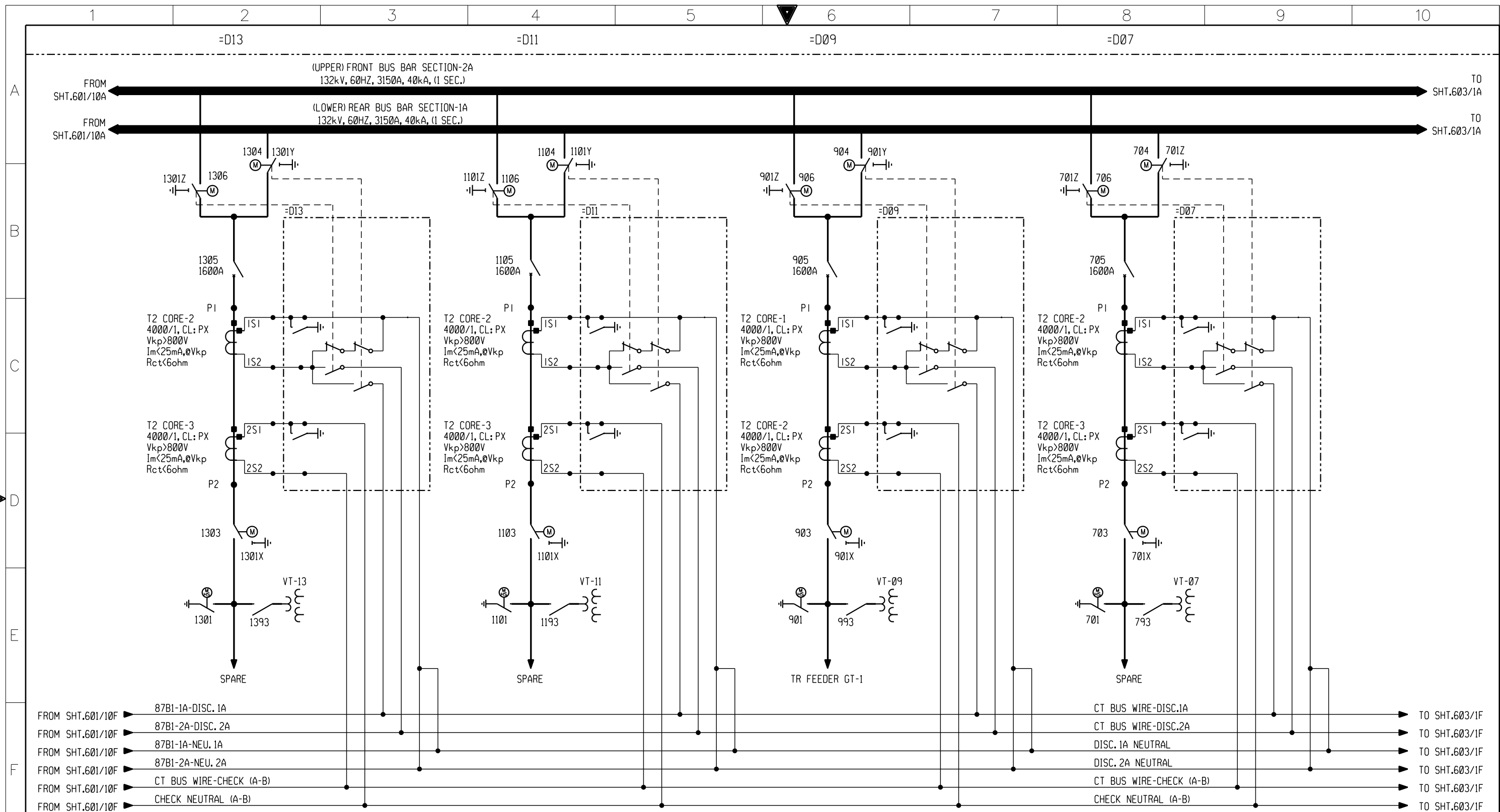


الشركة السعودية للكهرباء


Saudi Electricity Company

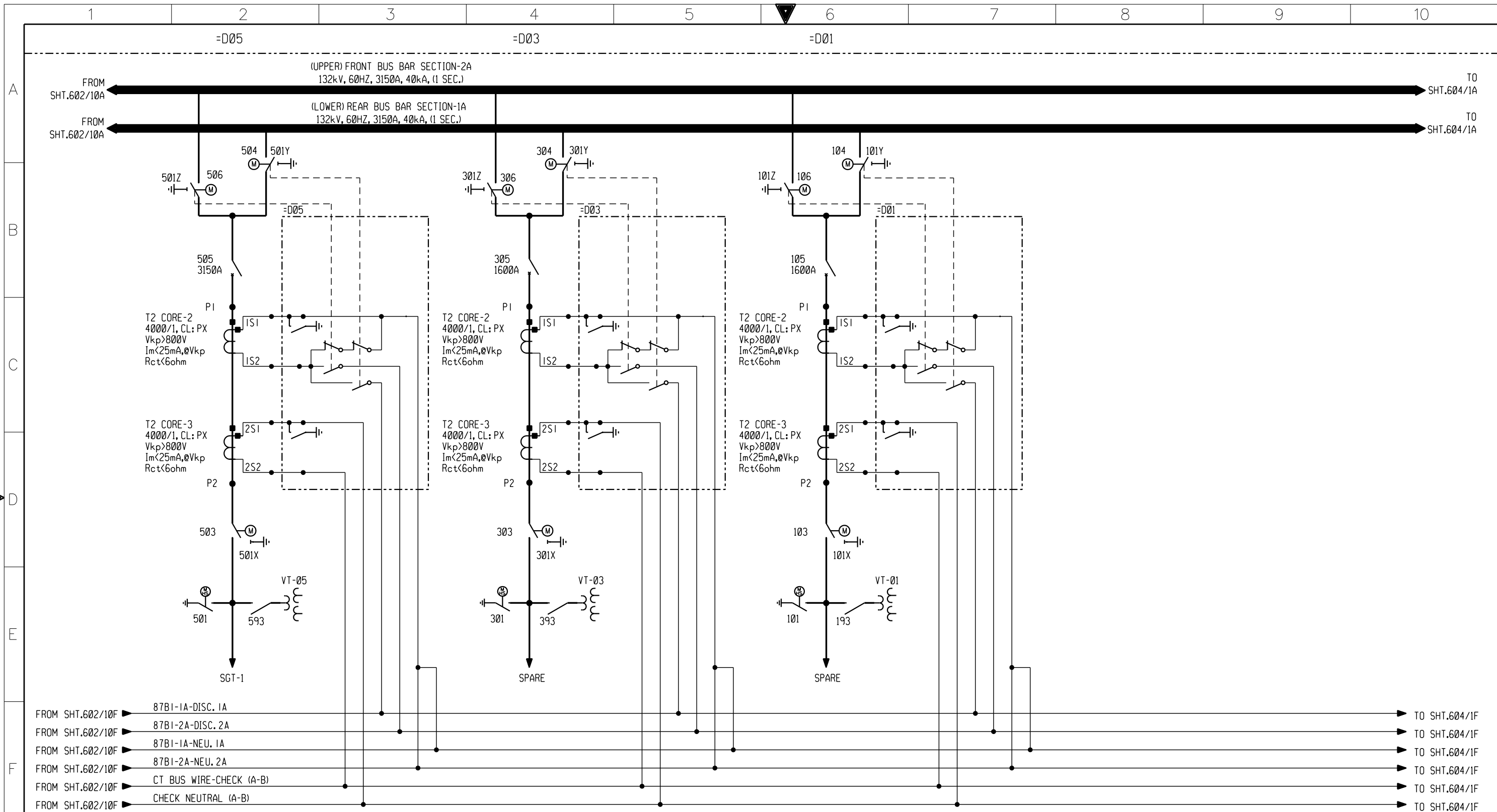
CONTRACT NO.	INDEX	PLANT NO.	DRAWING NUMBER	REV. NO.
1-1031018.01	P	C257	CD-181242	03

SHEET NO.
601
NEXT 602
REV. NO.



NOTE: DIRECT AUX CONTACTS OF BUS ISOLATORS
TO BE USED FOR CT SWITCHING.

G	AS-BUILT BY _____ DATE _____			PROTECTION LOGIC DIAGRAM (AC CIRCUITS)		 <div>الشركة السعودية للكهرباء Saudi Electricity Company</div>				SHEET NO.			
	03	28.12.11	REVISED AS PER SEC LETTER #030343/270232/11, DATED: 10/09/2011	DRAWN BY _____ ISHTIAD _____ CHECKED BY _____ YAHYA		132KV BUSBAR PROTECTION		602					
	02	06.08.11	REVISED AS PER SEC LETTER #030343/0144/11, DATED: 29/06/2011	DATE STARTED _____ 29.01.2011 _____ DATE COMPLETED _____ 29.01.2011		CONSTRUCTION OF NEW 380/132/13.8KV S/S#9027		CONTRACT NO.		INDEX	PLANT NO.	DRAWING NUMBER	REV. NO.
	01	03.04.11	REVISED AS PER SEC LETTER #030343/0037/11, DATED: 22-03-2011	OPRG. DEPT. _____ ENG. DEPT. _____		RIYADH SAUDI ARABIA		1-1031018.01		P	C257	CD-181242	03
	REV. NO.	DATE	DESCRIPTION										




NOTE: DIRECT AUX CONTACTS OF BUS ISOLATORS
TO BE USED FOR CT SWITCHING.

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AS-BUILT			BY	DATE		
03	28.12.11	REVISED AS PER SEC LETTER #030343/270232/11, DATED: 10/09/2011				
02	06.08.11	REVISED AS PER SEC LETTER #030343/0144/11, DATED: 29/06/2011	DRAWN BY	ISHTIAD	CHECKED BY	YAHYA
01	03.04.11	REVISED AS PER SEC LETTER #030343/0037/11, DATED: 22-03-2011	DATE STARTED	29.01.2011	DATE COMPLETED	29.01.2011
REV. NO.	DATE	DESCRIPTION	OPRG. DEPT.		ENG. DEPT.	

PROTECTION LOGIC DIAGRAM (AC CIRCUITS)	
132KV BUSBAR PROTECTION	
CONSTRUCTION OF NEW 380/132/13.8KV S/S#9027	
RIYADH SAUDI ARABIA	

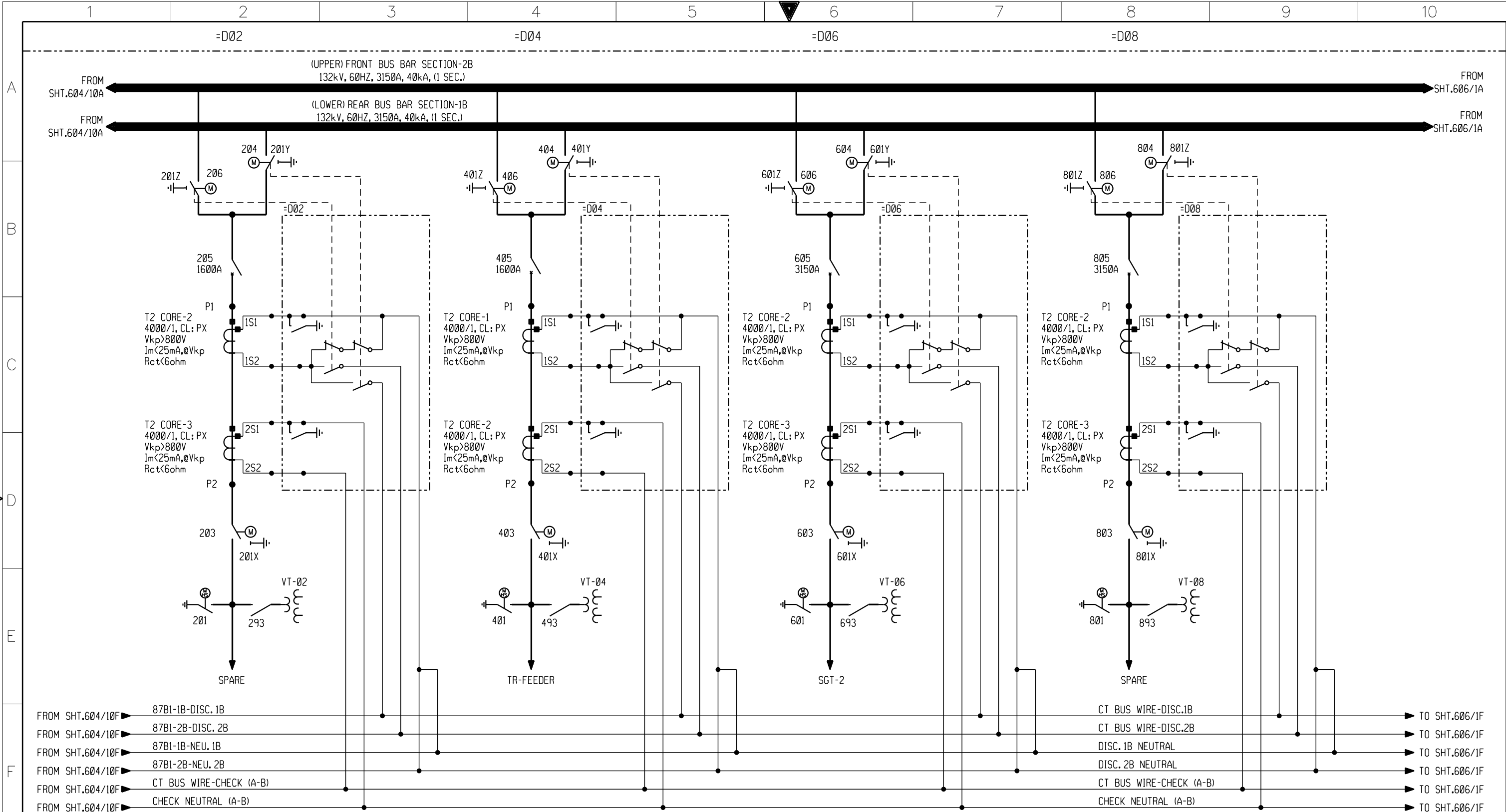


الشركة السعودية للكهرباء

Saudi Electricity Company

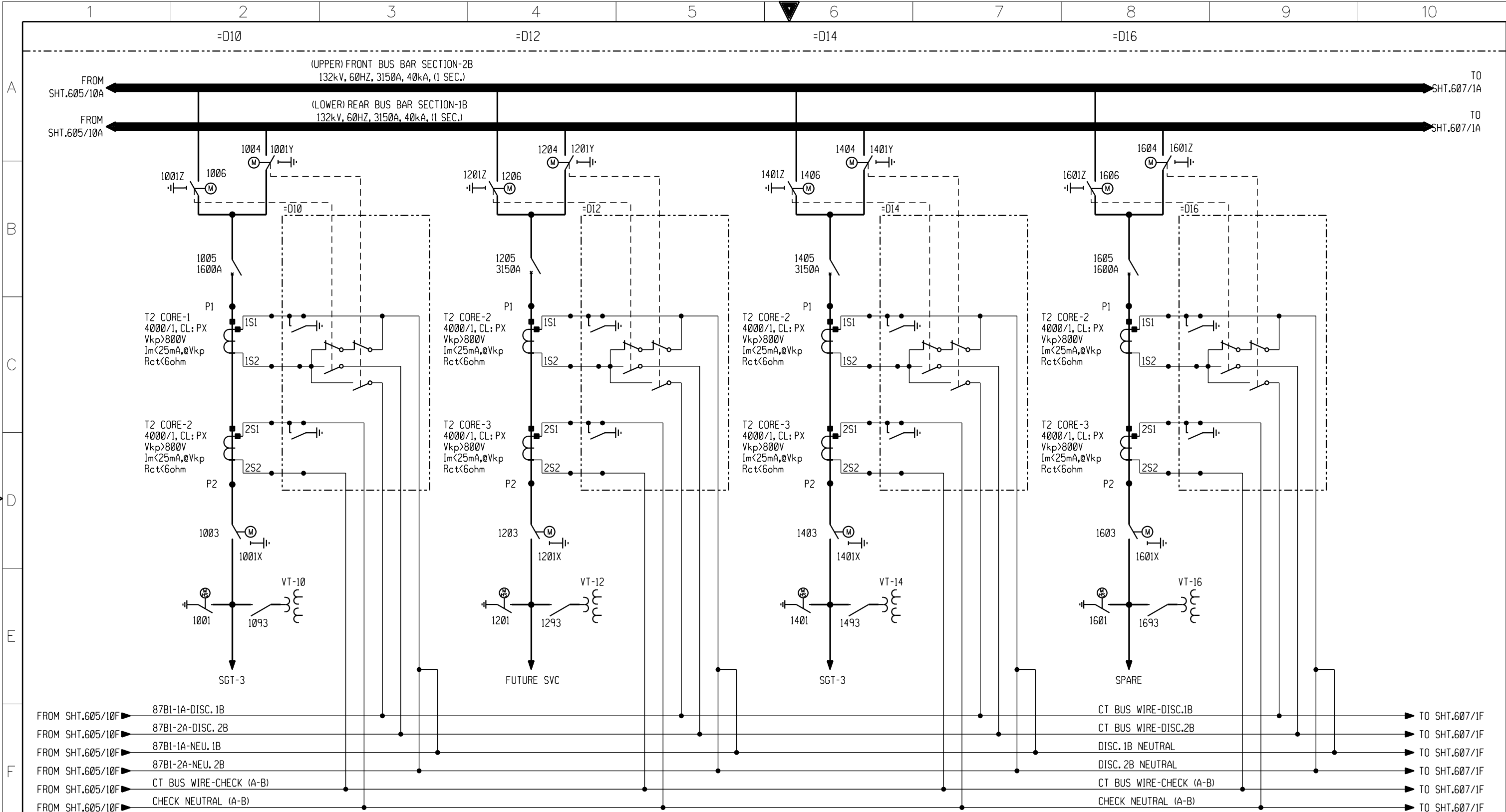
CONTRACT NO.	INDEX	PLANT NO.	DRAWING NUMBER	REV. NO.
1-1031018.01	P	C257	CD-181242	03

SHEET NO.
603
NEXT
604



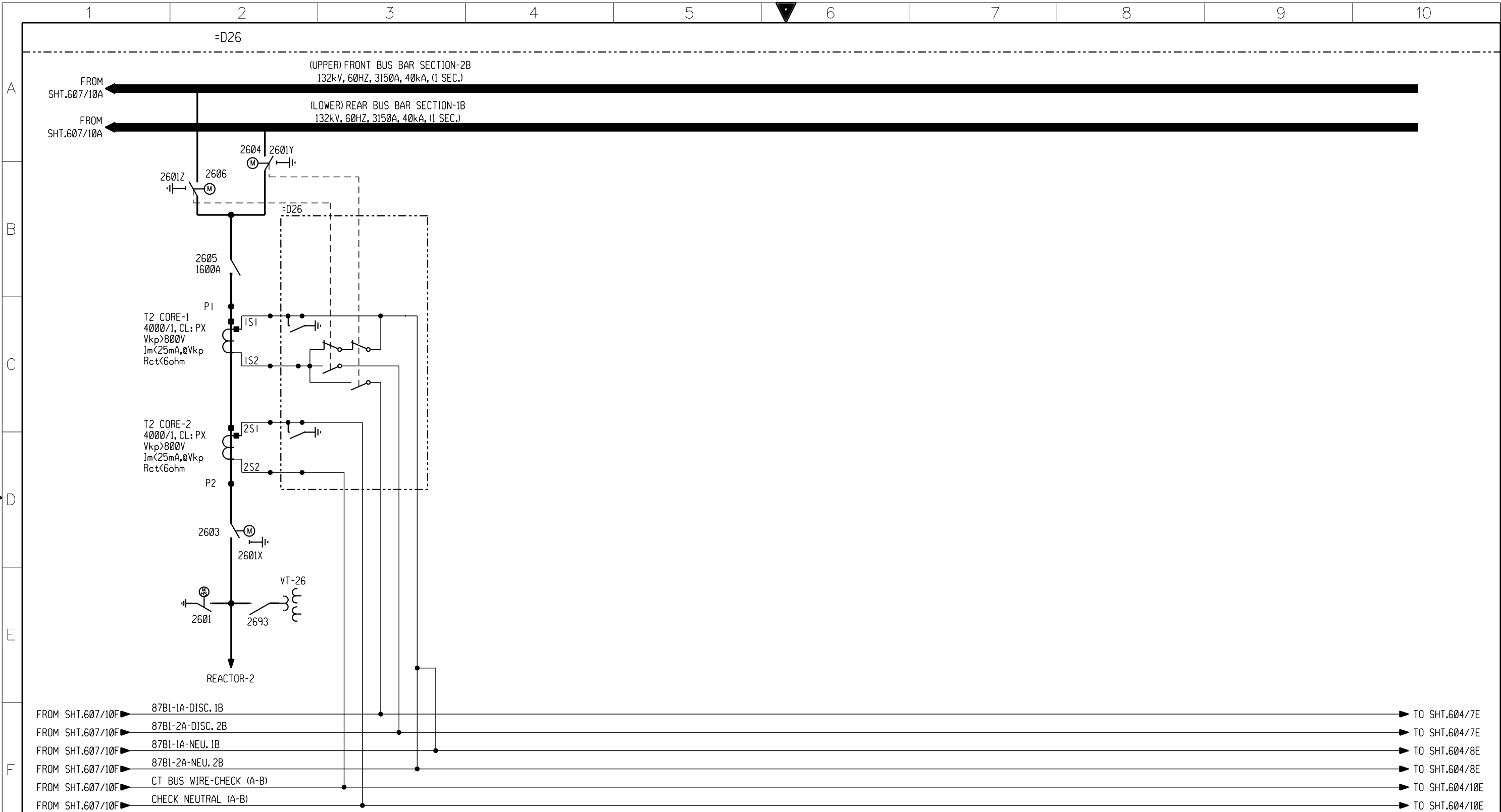
NOTE: DIRECT AUX CONTACTS OF BUS ISOLATORS
TO BE USED FOR CT SWITCHING.

AS-BUILT				PROTECTION LOGIC DIAGRAM (AC CIRCUITS)				الشركة السعودية للكهرباء Saudi Electricity Company				SHEET NO.
BY _____				132KV BUSBAR PROTECTION				CONTRACT NO.				605
DATE _____				CONSTRUCTION OF NEW 380/132/13.8KV S/S#9027				INDEX				NEXT 606
REV. NO.				RIYADH SAUDI ARABIA				PLANT NO.				REV. NO.
DATE				20931021/00				DRAWING NUMBER				03
DESCRIPTION				CD-181242				SEC/COA-D (2008/03)				
OPRG. DEPT.				SAUDI ARABIA				EDMS				
ENG. DEPT.				SAUDI ARABIA				VECTOR				





NOTE: DIRECT AUX CONTACTS OF BUS ISOLATORS
TO BE USED FOR CT SWITCHING.

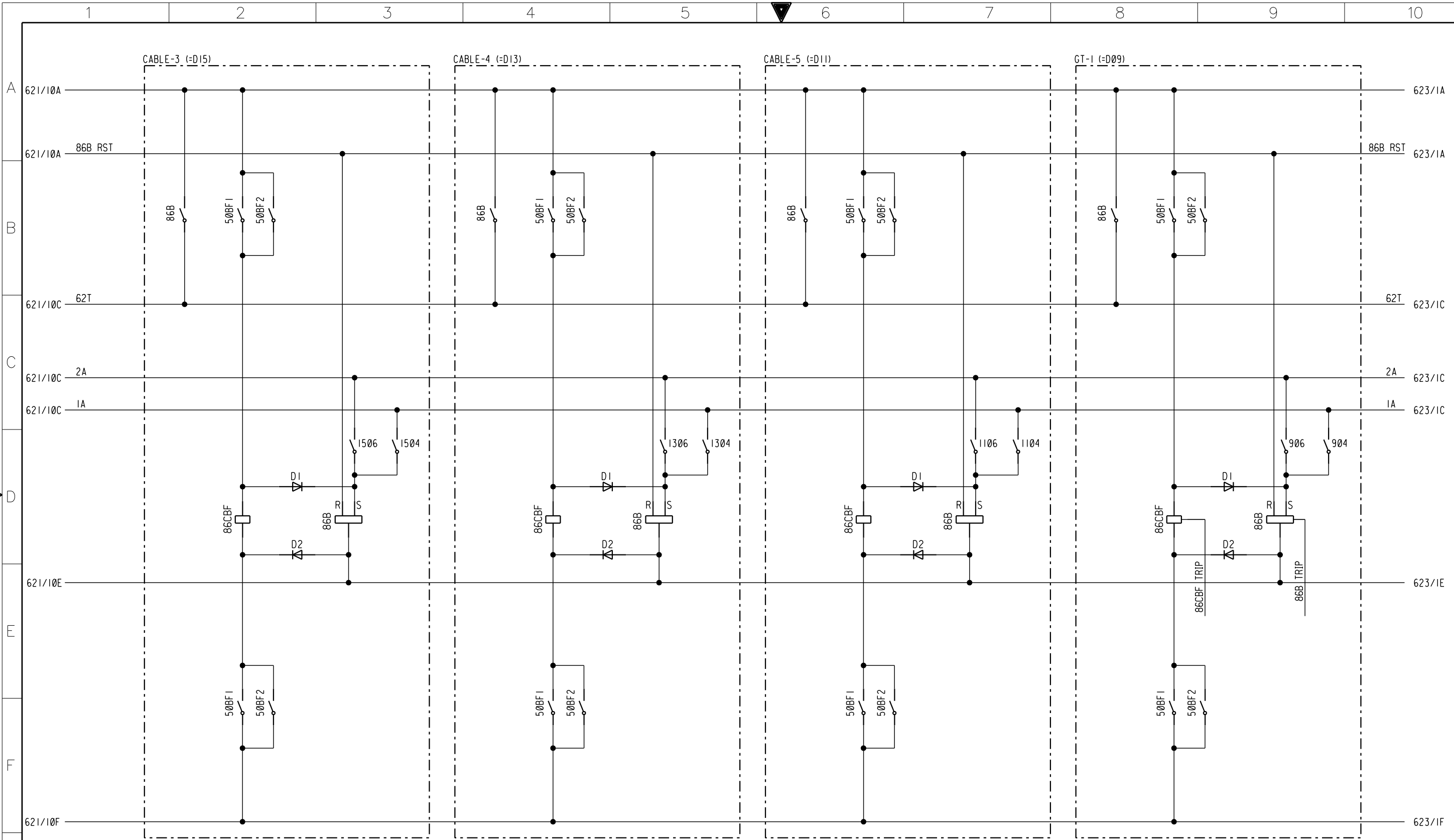
AS-BUILT				PROTECTION LOGIC DIAGRAM (AC CIRCUITS)				الشركة السعودية للكهرباء Saudi Electricity Company				SHEET NO.
03	28.12.11	REVISED AS PER SEC LETTER #030343/270232/11, DATED: 10/09/2011	DATE	132KV BUSBAR PROTECTION				606				NEXT
02	06.08.11	REVISED AS PER SEC LETTER #030343/0144/11, DATED: 29/06/2011	DRAWN BY ISHTIAQ CHECKED BY YAHYA	CONSTRUCTION OF NEW 380/132/13.8KV S/S#9027				607				REV. NO.
01	03.04.11	REVISED AS PER SEC LETTER #030343/0037/11, DATED: 22-03-2011	DATE STARTED 29.01.2011 DATE COMPLETED 29.01.2011	RIYADH SAUDI ARABIA				CONTRACT NO.	INDEX	PLANT NO.	DRAWING NUMBER	03
REV. NO.	DATE	DESCRIPTION	OPRG. DEPT. ENG. DEPT.					20931021/00	P	C257	CD-181242	




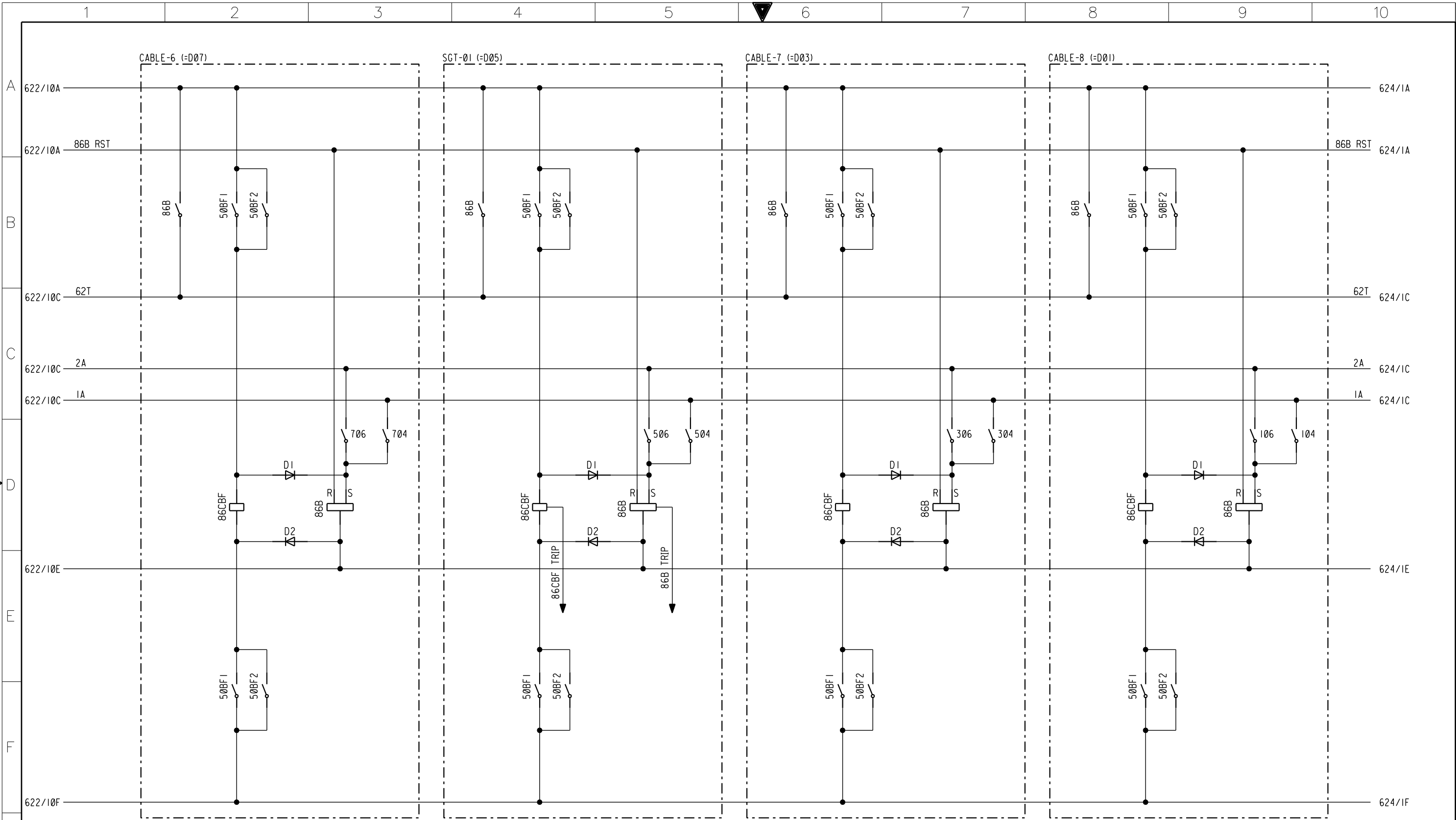
NOTE: DIRECT AUX CONTACTS OF BUS ISOLATORS
TO BE USED FOR CT SWITCHING.

G	AS-BUILT			BY _____	DATE _____	PROTECTION LOGIC DIAGRAM (AC CIRCUITS)		<div><div>الشركة السعودية للكهرباء Saudi Electricity Company</div></div>				SHEET NO.
	03	28.12.11	REVISED AS PER SEC LETTER #030343/270232/11, DATED: 10/09/2011	DRAWN BY _____ ISHTIAD _____ CHECKED BY _____ YAHYA _____		132KV BUSBAR PROTECTION						608
	02	06.08.11	REVISED AS PER SEC LETTER #030343/0144/11, DATED: 29/06/2011	DATE STARTED _____ 29.01.2011 _____ DATE COMPLETED _____ 29.01.2011 _____		CONSTRUCTION OF NEW 380/132/13.8KV S/S#9027		CONTRACT NO.				NEXT
	01	03.04.11	REVISED AS PER SEC LETTER #030343/0037/11, DATED: 22-03-2011	OPRG. DEPT. _____ ENG. DEPT. _____		RIYADH SAUDI ARABIA		INDEX				620
	REV. NO.	DATE	DESCRIPTION					PLANT NO.				REV. NO.
							DRAWING NUMBER					
							1-1031018.01				03	

	1	2	3	4	5	6	7	8	9	10				
A	PHILOSOPHY OF 132kV DOUBLE BUS-BAR PROTECTION UNDER DIFFERENT OPERATING CONDITION VIS-A-VIS TRIPPING INITIATION OF BUS-BAR PROTECTION													
B														
C	DISCRIMINATION ZONE						CHECK ZONE			TRIP INITIATE				
D	IN/OUT POSITION	CT SUP. STATUS	BUSBAR PROTECTION RELAY		IN/OUT POSITION	CT SUP. STATUS	BUSBAR PROTECTION RELAY							
E	IN	HEALTHY	OPERATED		IN	HEALTHY	OPERATED		YES					
	IN	HEALTHY	OPERATED		OUT	HEALTHY	-		YES					
	IN	HEALTHY	OPERATED		IN	UNHEALTHY	NOT OPERATED		YES					
	OUT	HEALTHY	-		IN	HEALTHY	OPERATED		YES					
	OUT	HEALTHY	-		OUT	HEALTHY	-		NO					
F	OUT	HEALTHY	-		IN	UNHEALTHY	NOT OPERATED		NO					
	IN	UNHEALTHY	NOT OPERATED		IN	HEALTHY	OPERATED		YES					
	IN	UNHEALTHY	NOT OPERATED		OUT	HEALTHY	-		NO					
G	IN	UNHEALTHY	NOT OPERATED		IN	UNHEALTHY	NOT OPERATED		NO					
	NOTES: 1) UNHEALTHY CONDITION OF CT SUPERVISION ALSO INCLUDES POSSIBILITY OF MANUAL BLOCKING. 2) DISCRIMINATION ZONE INCLUDES ANY / ALL ZONE 1A, 2A, 1B, 2B, 1C, 2C, 1D, & 2D.													
G	AS-BUILT				TRIPING PHILOSOPHY				 الشركة السعودية للكهرباء Saudi Electricity Company		SHEET NO.			
	BY _____ DATE _____				132kV BUSBAR PROTECTION PANEL						620			
	03	28.12.11	REVISED AS PER SEC LETTER #030343/270232/11, DATED: 10/09/2011	DRAWN BY _____ ISHTIAD _____ CHECKED BY _____ YAHYA _____		CONSTRUCTION OF NEW 380/132/13.8KV S/S#9027				CONTRACT NO.	INDEX	PLANT NO.	DRAWING NUMBER	REV. NO.
	02	06.08.11	REVISED AS PER SEC LETTER #030343/0144/11, DATED: 29/06/2011	DATE STARTED _____ 29.01.11 _____ DATE COMPLETED _____ 29.01.11 _____		RIYADH SAUDI ARABIA				1-1031018.01	P	C257	CD-181242	03
	01	03.04.11	REVISED AS PER SEC LETTER #030343/0037/11, DATED: 22-03-2011	OPRG. DEPT. _____ ENG. DEPT. _____										
	REV. NO.	DATE	DESCRIPTION											




G	AS-BUILT			BY _____	DATE _____	PROTECTION LOGIC DIAGRAM (DC CIRCUITS)		 <div>الشركة السعودية للكهرباء Saudi Electricity Company</div>		SHEET NO. _____				
	03	28.12.11	REVISED AS PER SEC LETTER #030343/270232/11, DATED: 10/09/2011			132kV BUSBAR PROTECTION								
	02	06.08.11	REVISED AS PER SEC LETTER #030343/0144/11, DATED: 29/06/2011	DRAWN BY MHS		CHECKED BY YAHYA		CONSTRUCTION OF NEW 380/132/13.8KV S/S#9027		CONTRACT NO.	INDEX	PLANT NO.	DRAWING NUMBER	Folio No. _____
	01	03.04.11	REVISED AS PER SEC LETTER #030343/0037/11, DATED: 22-03-2011	DATE STARTED 30.01.11		DATE COMPLETED 30.01.11		RIYADH SAUDI ARABIA						
	REV. NO.	DATE	DESCRIPTION	OPRG. DEPT. _____		ENG. DEPT. _____								



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AS-BUILT			BY	DATE
03	28.12.11	REVISED AS PER SEC LETTER #030343/270232/11, DATED: 10/09/2011		
02	06.08.11	REVISED AS PER SEC LETTER #030343/0144/11, DATED: 29/06/2011	DRAWN BY MHS	CHECKED BY YAHYA
01	03.04.11	REVISED AS PER SEC LETTER #030343/0037/11, DATED: 22-03-2011	DATE STARTED 30.01.11	DATE COMPLETED 30.01.11
REV. NO.	DATE	DESCRIPTION	OPRG. DEPT.	ENG. DEPT.

PROTECTION LOGIC DIAGRAM (DC CIRCUITS)	
132kV BUSBAR PROTECTION	
CONSTRUCTION OF NEW 380/132/13.8KV S/S#9027	
RIYADH	SAUDI ARABIA

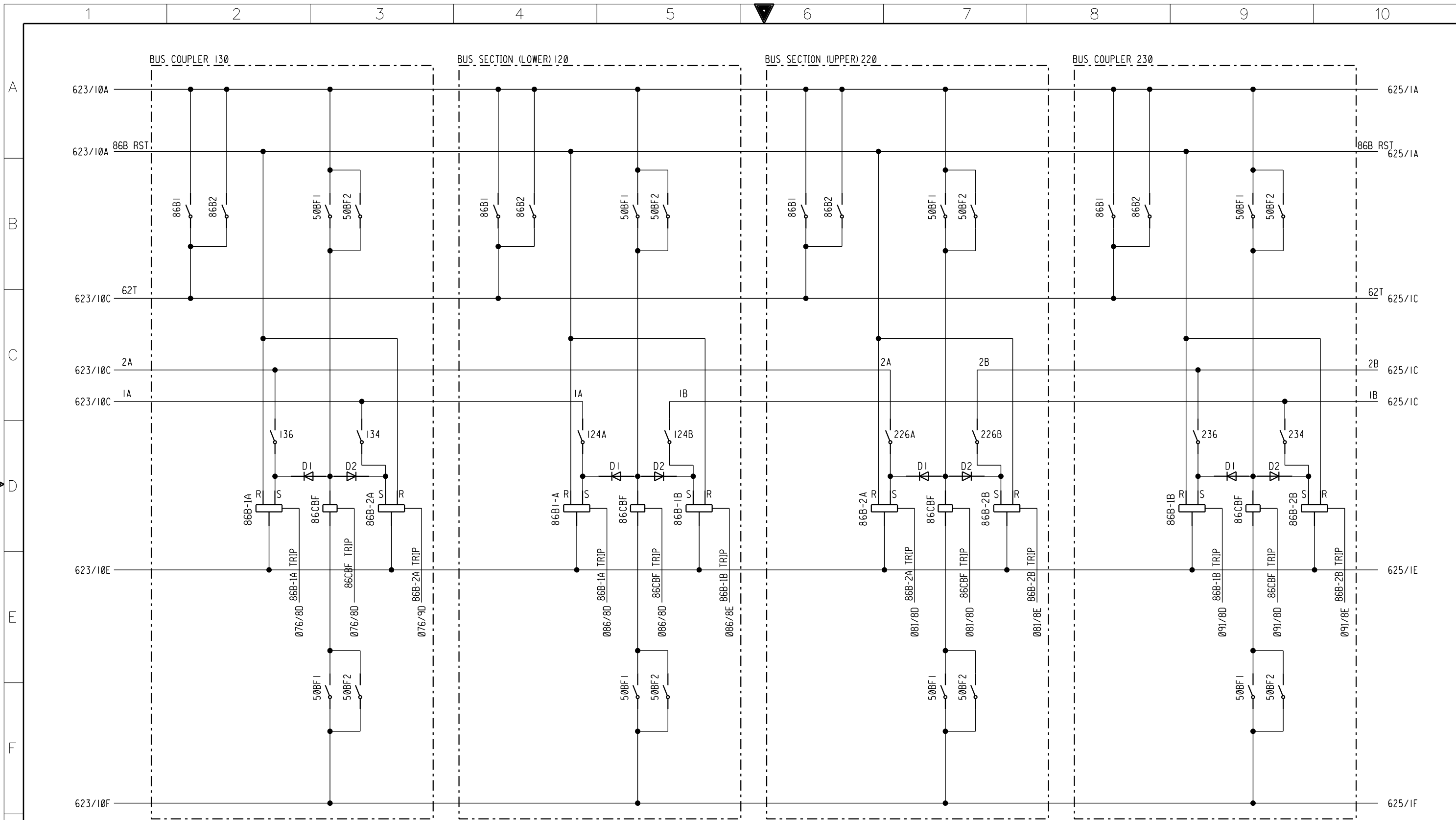


الشركة السعودية للكهرباء

Saudi Electricity Company

CONTRACT NO.	INDEX	PLANT NO.	DRAWING NUMBER	REV. NO.
1-1031018.01	P	C257	CD-181242	03

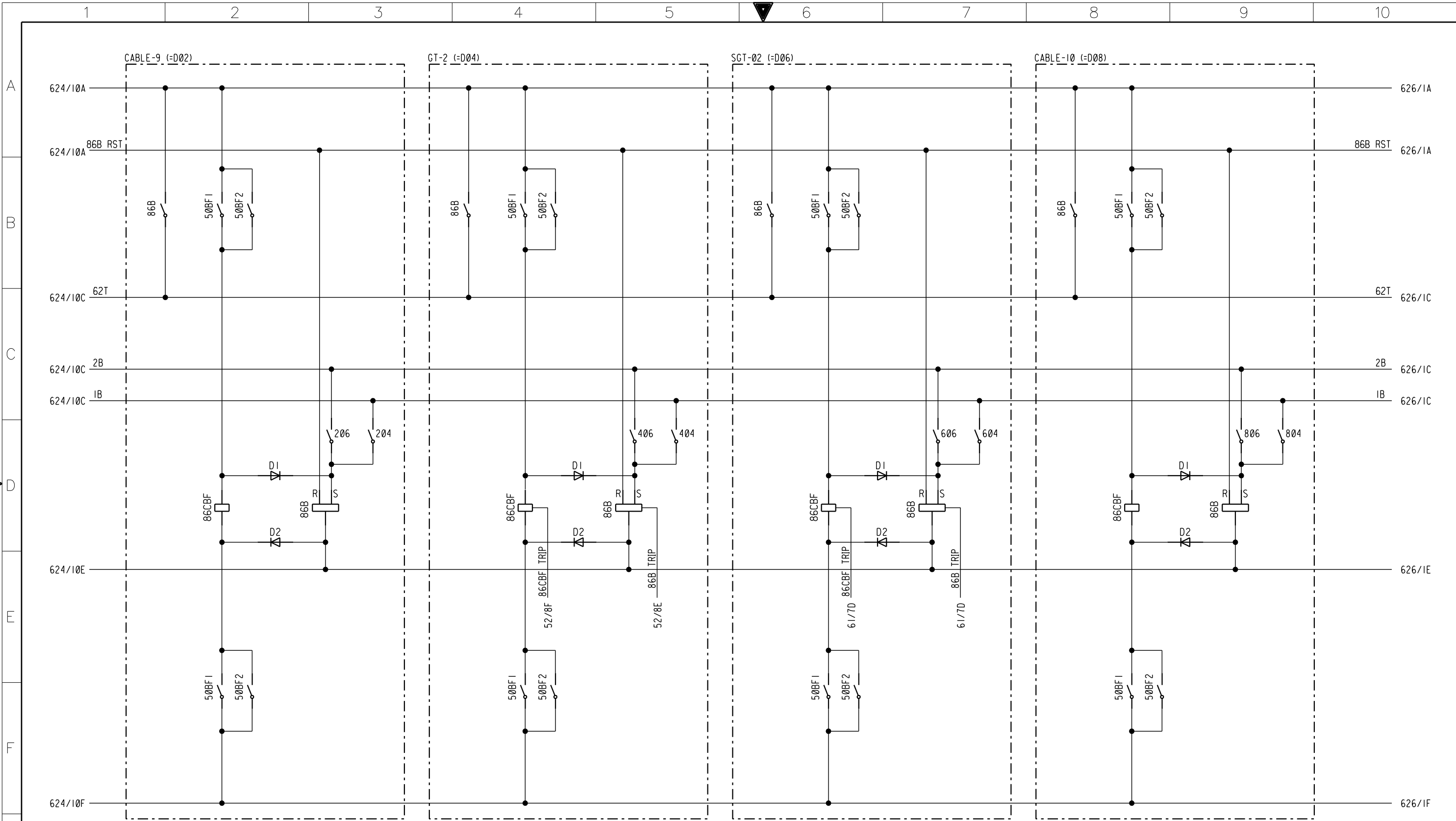
SHEET NO.	623
NEXT	624



AS-BUILT				PROTECTION LOGIC DIAGRAM (DC CIRCUITS)				الشركة السعودية للكهرباء		SHEET NO.	
BY _____				132kV BUSBAR PROTECTION				Saudi Electricity Company		624	
03	28.12.11	REVISED AS PER SEC LETTER #030343/270232/11, DATED: 10/09/2011	DRAWN BY MHS CHECKED BY YAHYA	CONSTRUCTION OF NEW 380/132/13.8KV S/S#9027				CONTRACT NO.	INDEX	PLANT NO.	DRAWING NUMBER
02	06.08.11	REVISED AS PER SEC LETTER #030343/0144/11, DATED: 29/06/2011	DATE STARTED 30.01.11 DATE COMPLETED 30.01.11	RIYADH SAUDI ARABIA				1-1031018.01	P	C257	CD-181242
01	03.04.11	REVISED AS PER SEC LETTER #030343/0037/11, DATED: 22-03-2011	OPRG. DEPT. _____ ENG. DEPT. _____								
REV. NO.	DATE	DESCRIPTION									

SEC/COA-D (2008/03)


SECD01



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AS-BUILT				BY _____		DATE _____	
03	28.12.11	REVISED AS PER SEC LETTER #030343/270232/11, DATED: 10/09/2011					
02	06.08.11	REVISED AS PER SEC LETTER #030343/0144/11, DATED: 29/06/2011	DRAWN BY _____ MHS	CHECKED BY _____ YAHYA			
01	03.04.11	REVISED AS PER SEC LETTER #030343/0037/11, DATED: 22-03-2011	DATE STARTED _____ 30.01.11	DATE COMPLETED _____ 30.01.11			
REV. NO.	DATE	DESCRIPTION	OPRG. DEPT. _____	ENG. DEPT. _____			

PROTECTION LOGIC DIAGRAM (DC CIRCUITS)			
132kV BUSBAR PROTECTION			
CONSTRUCTION OF NEW 380/132/13.8KV S/S#9027			
RIYADH		SAUDI ARABIA	

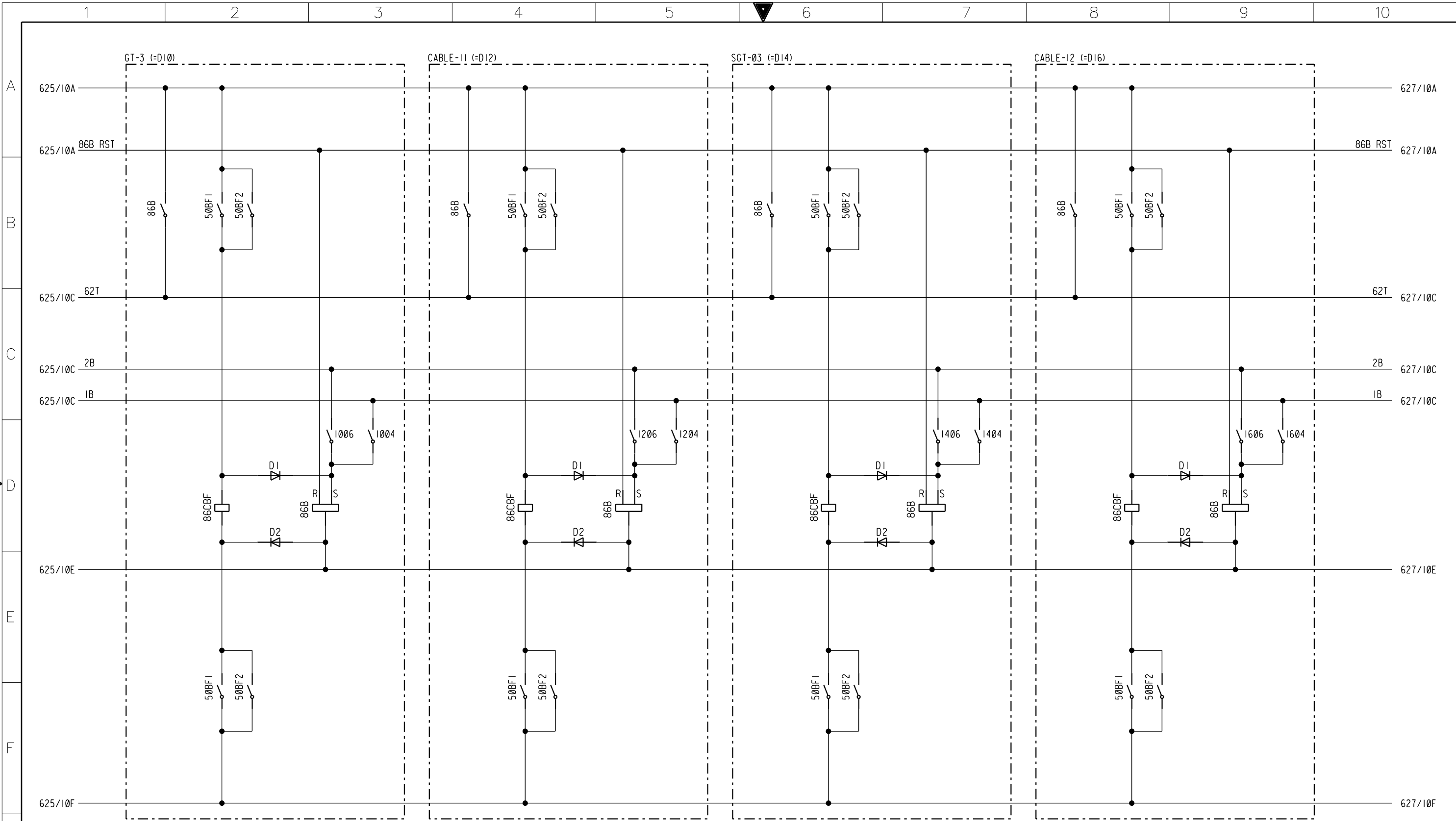


الشركة السعودية للكهرباء


Saudi Electricity Company

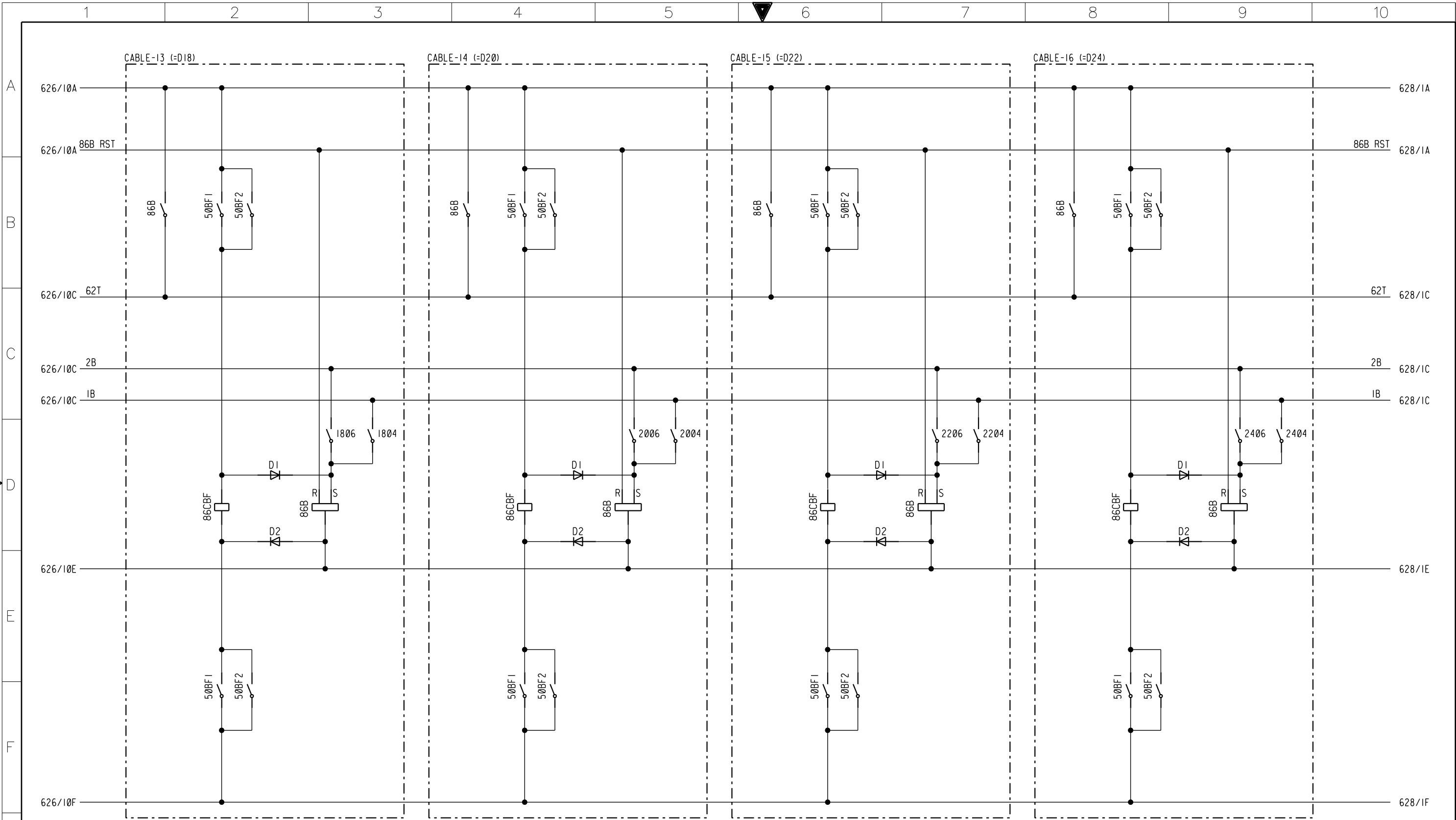
CONTRACT NO.	INDEX	PLANT NO.	DRAWING NUMBER	REV. NO.
1-1031018.01	P	C257	CD-181242	03

SHEET NO.	625
NEXT	626



G


AS-BUILT				BY _____		DATE _____		PROTECTION LOGIC DIAGRAM (DC CIRCUITS)				<div><div></div><div>الشركة السعودية للكهرباء Saudi Electricity Company</div></div>				SHEET NO.
03	28.12.11	REVISED AS PER SEC LETTER #030343/270232/11, DATED: 10/09/2011						132kV BUSBAR PROTECTION								626
02	06.08.11	REVISED AS PER SEC LETTER #030343/0144/11, DATED: 29/06/2011		DRAWN BY _____ MHS _____		CHECKED BY _____ YAHYA _____		CONSTRUCTION OF NEW 380/132/13.8KV S/S#9027				CONTRACT NO.	INDEX	PLANT NO.	DRAWING NUMBER	NEXT 627
01	03.04.11	REVISED AS PER SEC LETTER #030343/0037/11, DATED: 22-03-2011		DATE STARTED _____ 30.01.11 _____		DATE COMPLETED _____ 30.01.11 _____		RIYADH SAUDI ARABIA				1-1031018.01	P	C257	CD-181242	REV. NO.
REV. NO.	DATE	DESCRIPTION		OPRG. DEPT. _____		ENG. DEPT. _____										



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AS-BUILT			BY	DATE
03	28.12.11	REVISED AS PER SEC LETTER #030343/270232/11, DATED: 10/09/2011		
02	06.08.11	REVISED AS PER SEC LETTER #030343/0144/11, DATED: 29/06/2011	DRAWN BY MHS	CHECKED BY YAHYA
01	03.04.11	REVISED AS PER SEC LETTER #030343/0037/11, DATED: 22-03-2011	DATE STARTED 30.01.11	DATE COMPLETED 30.01.11
REV. NO.	DATE	DESCRIPTION	OPRG. DEPT.	ENG. DEPT.

PROTECTION LOGIC DIAGRAM (DC CIRCUITS)	
132kV BUSBAR PROTECTION	
CONSTRUCTION OF NEW 380/132/13.8KV S/S#9027	
RIYADH	SAUDI ARABIA

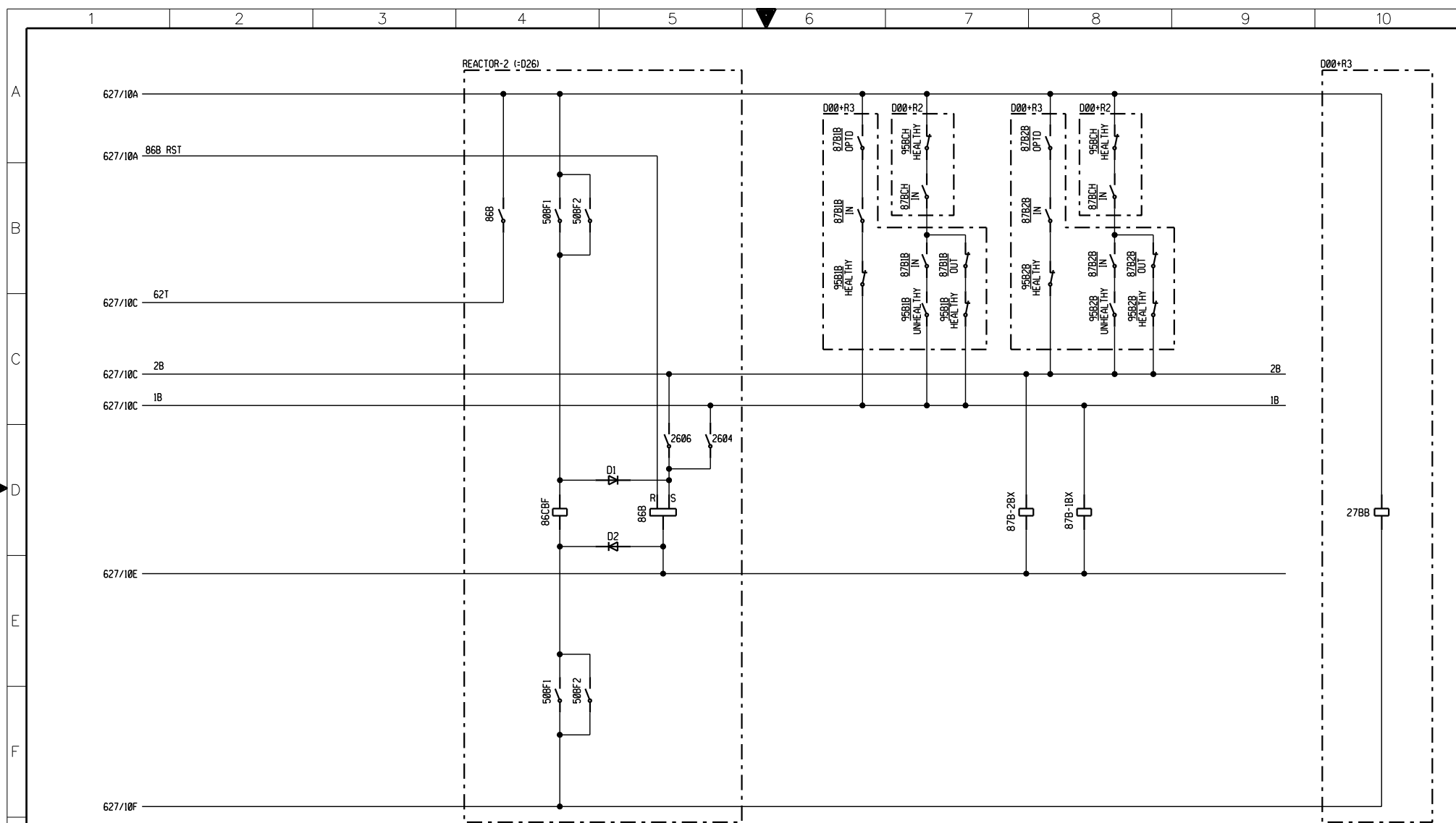


الشركة السعودية للكهرباء

Saudi Electricity Company

CONTRACT NO.	INDEX	PLANT NO.	DRAWING NUMBER	REV. NO.
1-1031018.01	P	C257	CD-181242	03

SHEET NO.	627
NEXT	628

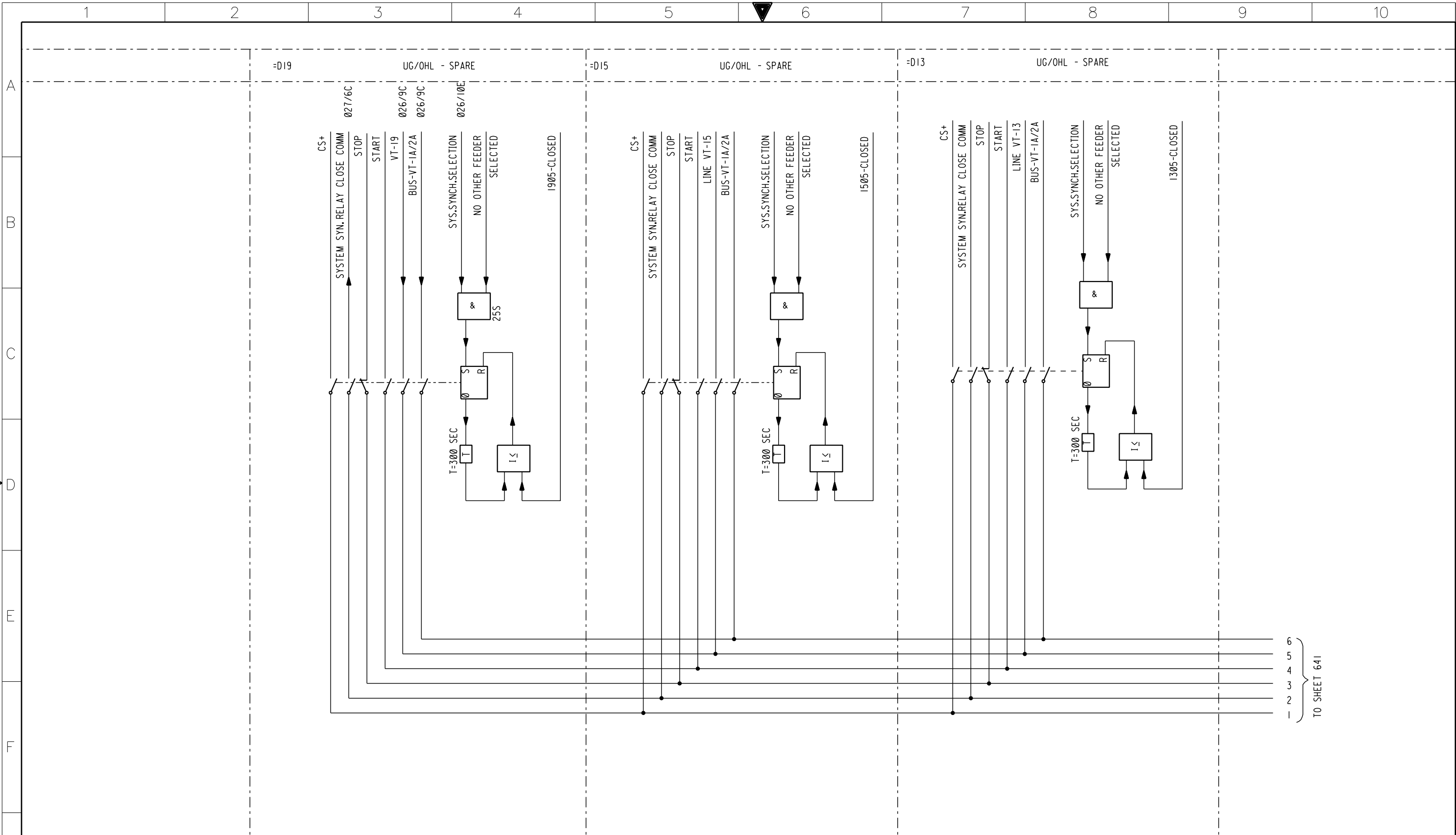


AS-BUILT				PROTECTION LOGIC DIAGRAM (DC CIRCUITS)				الشركة السعودية للكهرباء Saudi Electricity Company				SHEET NO.
03	28.12.11	REVISED AS PER SEC LETTER #030343/270232/11, DATED: 10/09/2011	DATE	132kV BUSBAR PROTECTION				CONSTRUCTION OF NEW 380/132/13.8KV S/S*9027				628
02	06.08.11	REVISED AS PER SEC LETTER #030343/0144/11, DATED: 29/06/2011	DATE	CONSTRUCTION OF NEW 380/132/13.8KV S/S*9027				CONSTRUCTION OF NEW 380/132/13.8KV S/S*9027				NEXT 640
01	03.04.11	REVISED AS PER SEC LETTER #030343/0037/11, DATED: 22-03-2011	DATE	CONSTRUCTION OF NEW 380/132/13.8KV S/S*9027				CONSTRUCTION OF NEW 380/132/13.8KV S/S*9027				REV. NO.
REV. NO.	DATE	DESCRIPTION		RIYADH SAUDI ARABIA				CONTRACT NO.	INDEX	PLANT NO.	DRAWING NUMBER	REV. NO.
								1-1031018.01	P	C257	CD-181242	03

SEC/COA-D (2008/03)


SECD01

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AS-BUILT				BY _____		DATE _____	
03	28.12.11	REVISED AS PER SEC LETTER #030343/270232/11, DATED: 10/09/2011	DRAWN BY _____ MHS _____	CHECKED BY _____ TAMER _____	PROTECTION LOGIC DIAGRAM (AC CIRCUITS)		
02	06.08.11	REVISED AS PER SEC LETTER #030343/0144/11, DATED: 29/06/2011			132kV SYSTEM SYNCHRONISING SCHEME		
01	03.04.11	REVISED AS PER SEC LETTER #030343/0037/11, DATED: 22-03-2011			CONSTRUCTION OF NEW 380/132/13.8kV S/S#9027		
REV. NO.	DATE	DESCRIPTION	OPRG. DEPT. _____	ENG. DEPT. _____	RIYADH SAUDI ARABIA		

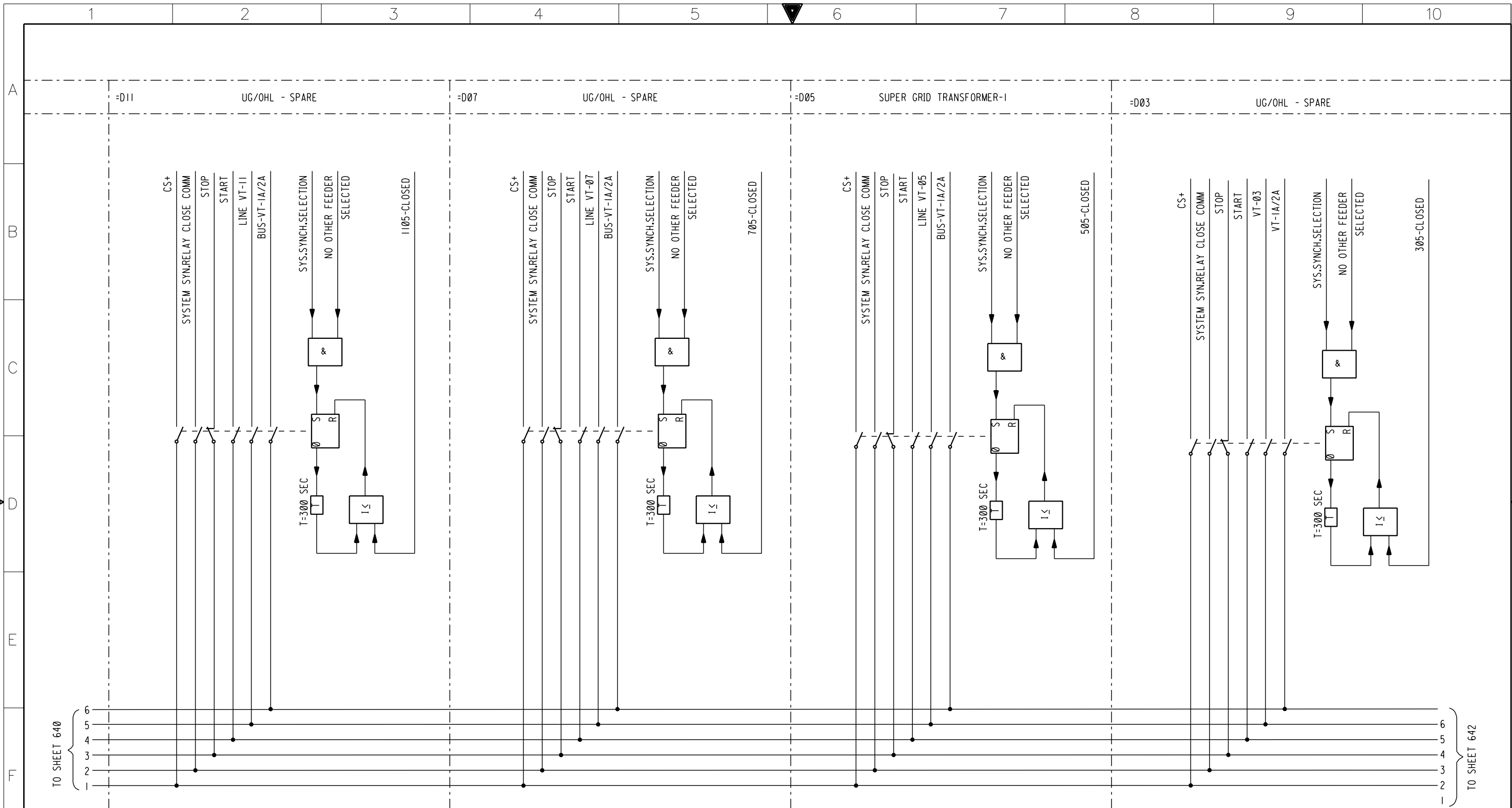


الشركة السعودية للكهرباء

Saudi Electricity Company

CONTRACT NO.	INDEX	PLANT NO.	DRAWING NUMBER	REV. NO.
1-1031018.01	P	C257	CD-181242	03

SHEET NO.	640
NEXT	641



AS-BUILT			BY _____		DATE _____		PROTECTION LOGIC DIAGRAM (AC CIRCUITS)				SHEET NO.	
03	28.12.11	REVISED AS PER SEC LETTER #030343/270232/11, DATED: 10/09/2011	DRAWN BY MHS		CHECKED BY TAMER		132kV SYSTEM SYNCHRONISING SCHEME				641	
02	06.08.11	REVISED AS PER SEC LETTER #030343/0144/11, DATED: 29/06/2011	DATE STARTED 11.07.11		DATE COMPLETED 11.07.11		CONSTRUCTION OF NEW 380/132/13.8kV S/S*9027				NEXT 642	
01	03.04.11	REVISED AS PER SEC LETTER #030343/0037/11, DATED: 22-03-2011	OPRG. DEPT. _____		ENG. DEPT. _____		RIYADH SAUDI ARABIA				REV. NO.	
REV. NO.	DATE	DESCRIPTION					CONTRACT NO.	INDEX	PLANT NO.	DRAWING NUMBER	03	

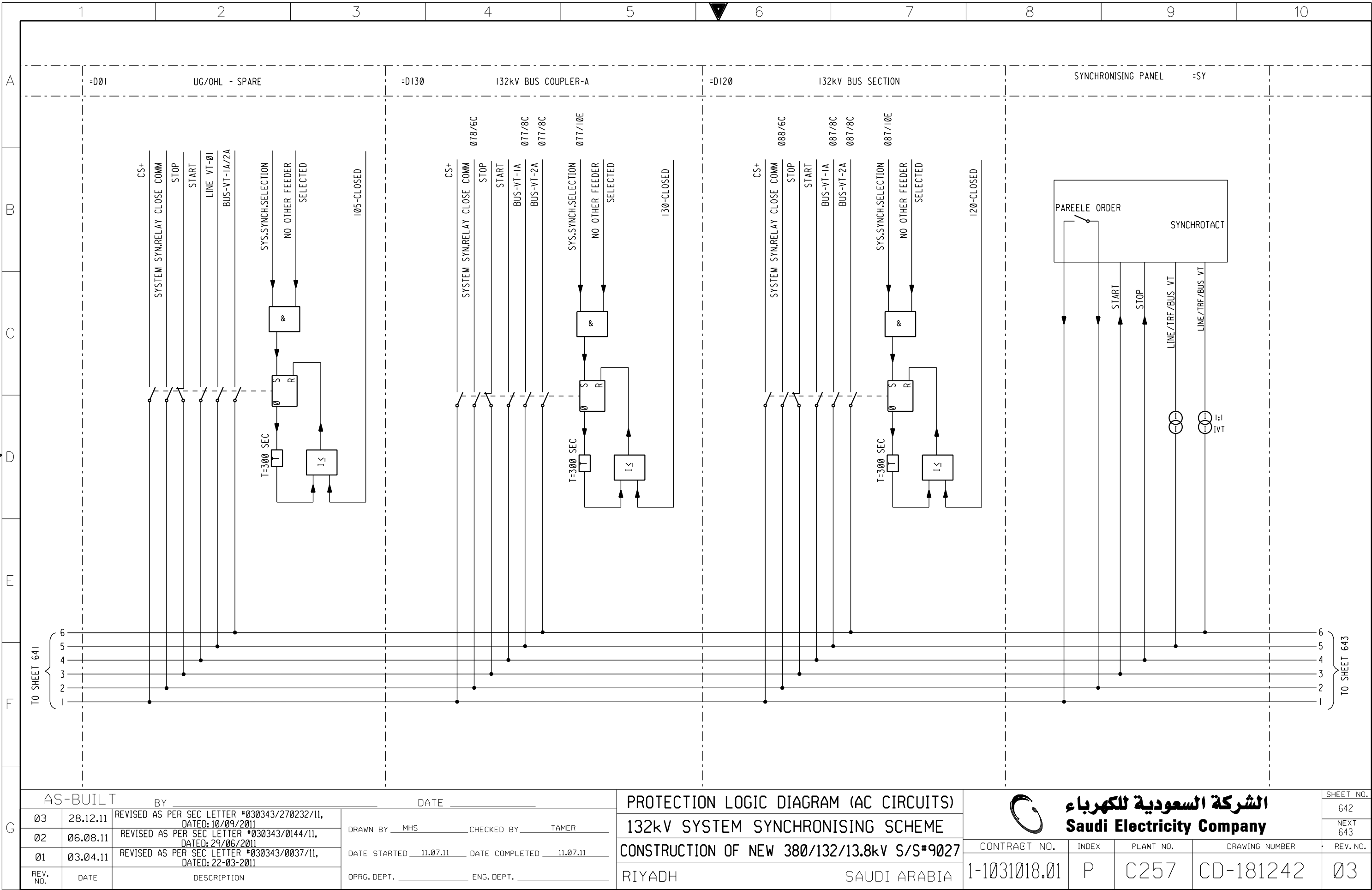


الشركة السعودية للكهرباء
Saudi Electricity Company


1-1031018.01	P	C257	CD-181242	03
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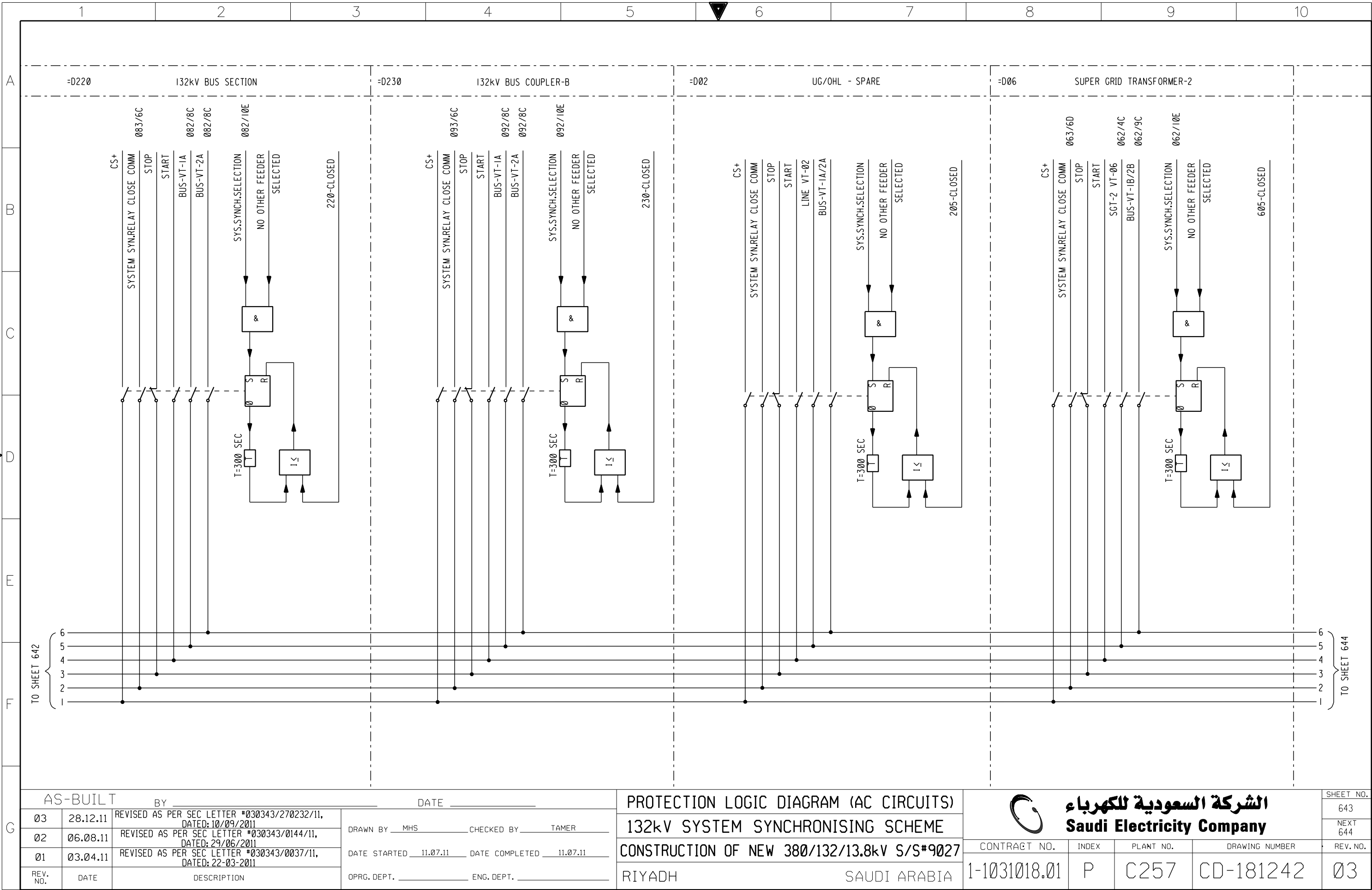
SEC/COA-D (2008/03)

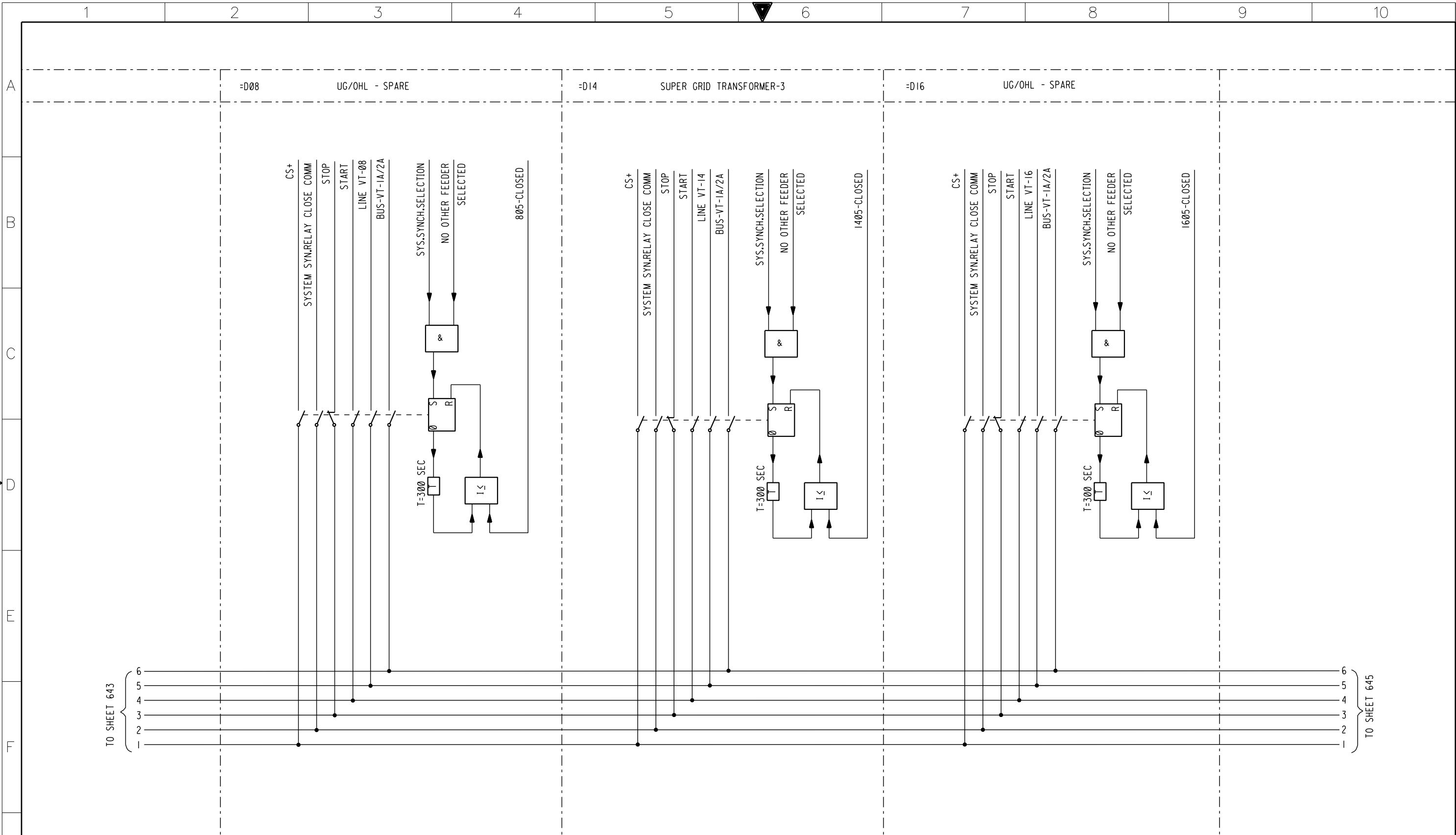
SECD01




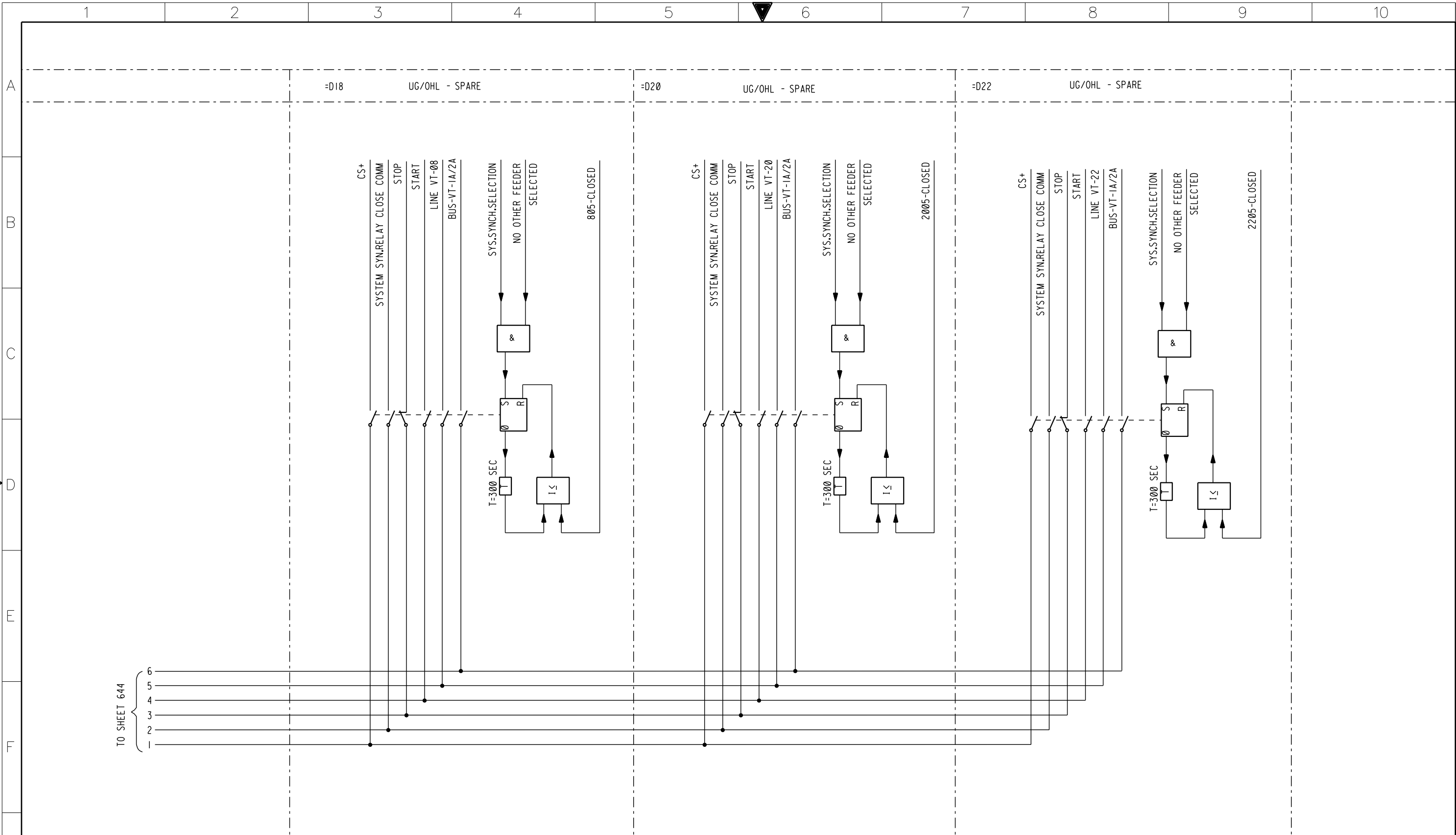
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AS-BUILT			BY	DATE	PROTECTION LOGIC DIAGRAM (AC CIRCUITS)		<div><div></div><div>الشركة السعودية للكهرباء</div><div>Saudi Electricity Company</div></div>				SHEET NO.		
03	28.12.11	REVISED AS PER SEC LETTER #030343/270232/11, DATED: 10/09/2011									642		
02	06.08.11	REVISED AS PER SEC LETTER #030343/0144/11, DATED: 29/06/2011	DRAWN BY	MHS	CHECKED BY	TAMER	132kV SYSTEM SYNCHRONISING SCHEME						NEXT 643
01	03.04.11	REVISED AS PER SEC LETTER #030343/0037/11, DATED: 22-03-2011	DATE STARTED	11.07.11	DATE COMPLETED	11.07.11	CONSTRUCTION OF NEW 380/132/13.8kV S/S#9027		CONTRACT NO.	INDEX	PLANT NO.	DRAWING NUMBER	REV. NO.
REV. NO.	DATE	DESCRIPTION	OPRG. DEPT.		ENG. DEPT.		RIYADH SAUDI ARABIA		1-1031018.01	P	C257	CD-181242	03






AS-BUILT				PROTECTION LOGIC DIAGRAM (AC CIRCUITS)				 الشركة السعودية للكهرباء Saudi Electricity Company		SHEET NO.	
03	28.12.11	REVISED AS PER SEC LETTER #030343/270232/11, DATED: 10/09/2011	DATE	132kV SYSTEM SYNCHRONISING SCHEME						644	
02	06.08.11	REVISED AS PER SEC LETTER #030343/0144/11, DATED: 29/06/2011	DRAWN BY MHS CHECKED BY TAMER	CONSTRUCTION OF NEW 380/132/13.8kV S/S#9027			CONTRACT NO.	INDEX	PLANT NO.	DRAWING NUMBER	REV. NO.
01	03.04.11	REVISED AS PER SEC LETTER #030343/0037/11, DATED: 22-03-2011	DATE STARTED 11.07.11 DATE COMPLETED 11.07.11	RIYADH SAUDI ARABIA			1-1031018.01	P	C257	CD-181242	03
REV. NO.	DATE	DESCRIPTION		OPRG. DEPT. ENG. DEPT.							



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AS-BUILT			BY	DATE	PROTECTION LOGIC DIAGRAM (AC CIRCUITS)		<div><div></div><div>الشركة السعودية للكهرباء</div><div>Saudi Electricity Company</div></div>				SHEET NO.		
03	28.12.11	REVISED AS PER SEC LETTER #030343/270232/11, DATED: 10/09/2011									645		
02	06.08.11	REVISED AS PER SEC LETTER #030343/0144/11, DATED: 29/06/2011	DRAWN BY	MHS	CHECKED BY	TAMER	132kV SYSTEM SYNCHRONISING SCHEME		NEXT				
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REV. NO.	DATE	DESCRIPTION	OPRG. DEPT.		ENG. DEPT.		RIYADH SAUDI ARABIA		1-1031018.01	P	C257	CD-181242	03